BIRD-NESTING IN NORTH-WEST CANADA

RAINE



BIRD-NESTING

IN

NORTH-WEST CANADA

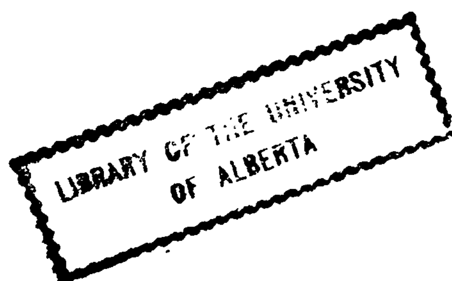
BY

WALTER RAINE.

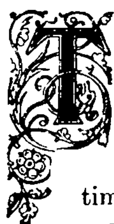
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PREFACE.



HOUGH the preface comes first it is usually written last, and to this custom "Bird-Nesting in North-West Canada" is no exception.

Now that the last chapter has been written, the time has come to give a few words of explanation.

The only time I have been able to devote to this work was during evenings after business hours, and not only had the book to be written, but the illustrations had also to be drawn at night, consequently the work has taken longer to execute than I had anticipated, and I wish to thank my subscribers for their patience and indulgence in waiting so long for their copies.

Though the title of the book would lead readers to expect the work to be purely Oological, it will be found to treat on matters not strictly Ornithological. I have branched off and given descriptions of the habits of the more important animals inhabiting the region traversed, and have also given a description of the scenery between Toronto and Vancouver.

The book is also intended to be a guide to sportsmen and anglers who intend visiting this territory, and it may even be of some use to intending settlers. I have given accurate descriptions of the birds' eggs, and also given their measurements. At the end of the book is an index, so that the book may answer as a reference.

The colored plates of birds' eggs are faithful representations of specimens in my collection, and have been drawn on

stone by myself, as well as the other illustrations of birds and scenery.

It must be understood that the book does not describe all the species which inhabit the North-West, for many common species known to be summer residents were not even observed, and the songs of many warblers, vireos, sparrows, and other small birds were heard in the bluffs and along the wooded streams, but I could not recognize the species. At some future time I hope to be able to give a more complete list of the birds of the North-West, and having recently succeeded in obtaining collectors at Great Slave Lake, and at the mouth of the Mackenzie River, on the Arctic coast, I hope, before long to be able to give an account of the birds which breed in this northern region.

Though this book claims no literary pretentions, I trust my readers will find it of sufficient interest to be worthy of their perusal, and, with all its faults, I therefore place it before you.

WALTER RAINE.

TORONTO, 1892.

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BIRD-NESTING

IN

NORTH-WEST CANADA.

CHAPTER I.

FOR several years I had contemplated spending a season collecting Ornithological specimens in north-west Canada, but it was not until June of the present year, 1891, that I found myself prepared for a month's sojourn amongst the prairies of Manitoba and Assiniboia. Ornithologists, anglers, and sportsmen puzzling their brains to decide where they will spend a fishing or shooting holiday, will do well to be guided by this book. As will be learned by a perusal of its pages, the Canadian Pacific railway offers inducements of no ordinary nature.

Florida was once considered the Ornithologist paradise, but of late years the plume-hunters have made sad havoc amongst the rookeries of the egrets, herons, ibis, terns and other birds, and friends of mine who have recently visited Florida have come away disappointed, having seen nothing of those vast communities of herons and other birds which we read of as once nesting there in large colonies.

What are undoubtedly the finest shooting-grounds to be found in any part of North America at the present day, are enclosed within the boundaries of the Canadian North-West No other territory can claim such a variety of game, nor such an abundance of it, nor such splendid facilities for reaching the haunts of the different species, and no other country can offer the daring sportsman such a chance of securing the heads and skins of the nobler game animals, such as Moose and Caribou as trophies of his skill and nerve in their pursuit.

Although the following pages will be found devoted chiefly to the nidification of birds in the North-West, still I have also endeavored to make this book useful as a guide to sportsmen and anglers who intend visiting this territory, and will attempt to cover some of the best shooting and fishing points in the vast expanse of prairies, brush-lands and lakes, lying between the eastern boundary of Manitoba and the Rocky Mountains.

Roughly speaking the prairie country is about 1000 miles wide, while other vast tracts extend far to the north of the Canadian Pacific Railway, offering inducements for special explorations to the Ornithologists who can afford to devote sufficient time to the work, for it is within this region that most of our rarest plovers, sandpipers, swans, ducks and geese, retire to lay their eggs and bring forth their young.

Of the birds of this prairie country, i.e., the Provinces of Manitoba, Assiniboia and Alberta, too much can hardly be said. They simply comprise the "happy hunting-grounds" of the Ornithologist dreams, and only those who have tested for themselves their amazing resources, can have any idea of the variety of birds to be found there.

But the reader unacquainted with the country may ask: Wherein lies the special superiority of the Canadian North-West, and why is it better than any other region?

The answer is easily found. These rolling grassy seas of rich prairie-land, intersected with an endless succession of lakes and sloughs, are the natural breeding-grounds now, as they have been for ages in the past, of the swift-winged myriads of migratory water-fowl that every spring, in obedience to their wonderful instinct, rise in blackening clouds from the drained lands, lagoons and rice fields of the south, and fan their long way over states and provinces, league after league, until they have gained these secure and lonely haunts, where they can reproduce their species unmolested by the destroyer. The lakes, streams and marshes are the fitting homes of these fowl, and they break the vast expanses of grass everywhere. There is a practically inexhaustible supply of food, and consequently the birds return year after year to the same points where they

were bred, and they will continue to do so as long as there is a flock left. Keen sportsmen were among the first to explore this region, when it was opened for settlement by the building of the railway, for right well they guessed what royal fields were there for the gun.

And there is big game also in plenty. The buffalo is nearly extinct, 'tis true, but the giant moose, king of the deer tribe, yet haunts every part of the country where a proper amount of browse can be found. The elk, caribou, jumping deer, common deer, prong-horn antelope, black and brown bears, grey wolf, lynx, coyote, fox, wolverine, beaver, and several other animals valued for their furs, are yet to be found in numbers, and finer variety of game than these, sportsmen cannot ask for.

But the amazing variety is among the feathered game. No less than seven species of grouse may be killed, including the prairie chicken, Canada grouse, dusky grouse, pintail grouse, ruffed grouse, ptarmigan, and willow ptarmigan.

Among the water-fowl are the trumpeter and whistling swans, the Canada goose, Ross's goose, lesser snow goose and brant; the mallard, canvas-back, redhead, ruddy duck, pintail, gadwall, wood duck, American widgeon, green-winged and blue-winged teal, shoveller, golden-eye, buffle-head and ring-necked duck; added to these are the curlew, golden plover, avocet, snipe, godwits, kildeer, Bartram's sandpiper, and numerous sandpipers and waders of lesser importance. About every marshy bit, the bittern, herons and rails will be found, and in addition to these are hundreds of white pelicans, little brown cranes, Franklins, Bonapartes, herring and ring-billed gulls; common, Foster's, and black terns, which are found in the lakes and sloughs, while amongst the rushes bordering the lakes and pools may be found nesting hundreds of yellow-headed blackbirds, red-winged starling, rusty grackle, and marsh wrens.

In the bluffs, where the trees are large enough to hold the nests, may be found breeding, the great-horned owl, long-eared and hawk owl, the rough-legged, redtail, and Swainson's buzzards, the goshawk, pigeon, sharp-shinned and sparrow hawks,

crows, and woodpeckers, while in the bushes may be found numerous nests of bronzed grackles, kingbirds, great grey shrike, vireos, thrushes and warblers. Out on the dry open prairie on the ground may be found the nests of shore larks, chestnut-collared and McCown's longspur, bay-winged buntings, Sprague's pipit, marsh harrier, Kildeer and Bartram's sandpiper.

This book has been written for the special benefit of young Oologists, and I have tried to make it both interesting and instructive, but I hope the more advanced Ornithologists, as well as sporstmen, will find something in the following pages to interest them.

To those who know nothing of the pleasure and excitement of bird-nesting, or the healthful fascinating pursuit of collecting specimens in any branch of natural history, this book may seem to be nothing but prattle, but such persons are to be pitied by the naturalist, for the uninitiated know nothing of the pure solid pleasure to be derived from these pursuits, and to them the beauty of summer is robbed of half its glory.

SUMMER TIMF.

O the sunny summer time !
O the leafy summer time !
Merry is the bird's life
When the year is in its prime,
Birds are by the waterfall,
Dashing in the rainbow's spray ;
Everywhere bright and lovely there are they.
Birds are in the forest old,
Singing in each hoary tree ;
Birds are in the green fields,
Birds are by the sea.



CHAPTER II.

LET'S AWAY TO THE PRAIRIES.

Art sick of the city's rush and strife,
And the endless chafe of a business life,
The crush and the roar of the busy street,
The jar of pavement, and stifling heat,
The endless toiling for dear-bought gain.
The wearying tension of nerve and brain?
Then cast all from you, and hie away
For a glorious, restful holiday.

The gun hangs long on the lonely wall;
The tackle is hid 'neath a dusty pall;
The reel has forgotten the song it sings;
The flies would fain stretch their deadly wings;
The basket can boast no tempting spread,
And the flask is cold and its spirits fled.
Man! is it right such things should be?
Why clank your chain when you might be free?

The breeze sighs soft with a breath divine,
And whispers a welcome from the pine;
The rocks re-echo the syren calls
Of a thousand rushing, foaming falls;
The game trout leaps in the shadowed pool;
The deer drinks long of the water cool;
And moose and caribou safely stray,
For your rod and rifle are far away.

Leave then, the desk, and ease the strain;
Leave the noisy machinery and the doubtful gain.
The breath of the woods gives strength anew,
And tunes the nerves till they answer true—
Seek nature's shrine that she may bless,
And lose your care in the wilderness;
For the grouse is sounding his rallying drum,
And the voice of forest and stream says "come!"

IT is the first of June, the happiest month of the year to the lovers of birds. The lilacs and apple-trees are in full blossom, sending forth a delicious perfume which comes through the open windows as I sit at supper, the last I shall have at home for many days. Several robins are singing their evening song before going to rest, and the nighthawk's screech can be heard

as they hover in circles in the sky above the house, while the mosquitoes sally forth singing merrily, and make their presence known by an occasional probe in the back of one's neck.

The sun has now gone down and supper being finished, I again look over my baggage to see that nothing has been forgotten, and, taking leave of the dear ones at home, I soon reach the street car, and a ride of fifteen minutes brings us to the station.

The train is ready and the engine is hissing as if impatient for to start; the platform is crowded with folks who have come to see their friends off; many apparently are going out to the west to seek new homes.

The passengers are all seated; in a few moments the signal is given, the engine bell begins to toll, and we glide out of the station into the dark.

It is midnight, and the passengers soon quiet down, and as the train was very crowded I could not obtain the comfort of a berth in a sleeper, so made myself as comfortable as I could under the circumstances; putting on my slippers and wrapping myself in a rug and placing a pillow in a corner of the seat, I managed to doze for a few hours.

We jogged along, and at day-break we find we have reached the famous Muskoka district, the summer resort for Torontonians, where, amongst the numerous lakes, excellent boating and fishing may be had. This is also a fine district for the sportsmen, and scores of deer and many a large fat black bear find their way into the Toronto market every winter. We pass many lakes studded with numerous rocky islands, with a few pine trees growing on them. Many ducks are seen swimming out on these small lakes, and several Loons are observed, for this is one of their favorite haunts, and I have several clutches of their eggs that have been collected on the islands of these lakes. In this district the loon makes no nest, but simply lays its two large brown eggs, spotted with black, on the bare rocks a few feet from the water's edge. We soon reach Bracebridge, well-known to hunters, for this is one of the places they get off at, and the woods, two or three miles back from the railway, abound with deer and small game.

We are now going through a very wild, rocky piece of country, and are on the alert for the sight of a bear or a deer. Passing Huntsville, one hour's ride brings us to within sight of Lake Nipissing, an extensive and beautiful sheet of water, 40 miles long and 10 wide, with forest-clad shores and islands. A short ride along the shore of the lake, and we run into the small town of North Bay, and here we have to change cars, having reached the main line of the Canadian Pacific railway. The train from Montreal and Ottawa soon afterwards arrives, and we have to stop here for two hours. The day is very cold and it began to rain. North Bay is a favorite centre for moose hunters, and many a handsome head and pair of antlers have I seen that have been obtained in the forests to the north of North Bay. At this place guides and supplies for shooting expeditions may be obtained. This is also an excellent district for fishing. As it was very cold and beginning to snow, we were glad to get into the train which was now being made up of colonists' cars, and which has to be our home for three days and two nights before Winnipeg is reached. Selecting a car, we find among the new passengers representatives of all grades of society, gentlemen travelling for pleasure, commercial travellers, young men just out from England going out seeking fortunes in farms or ranching, emigrants, sturdy Scotchmen with their rosy-cheeked daughters going to take up farms in the North-West, and land-hunters in plenty, with their pockets stuffed full of maps and pamphlets, gold and silver miners for the mountains, and coal miners for the Saskatchewan region. There is not a sorrowful visage in the party, every face wears a bright and expectant look, and all try and make themselves agreeable, and for the first few hours it's a common expression to hear, "what part are you going to?" Some are only going as far as Winnipeg, others to British Columbia and California, but most are going to Manitoba or Assiniboia, to settle down to farming. One young woman has come from Scotland and is on her way to Edmonton, in Alberta, to marry a young farmer who had left Scotland three years previously, and now possessed a large farm at Edmonton. Leaving North Bay, we

run along the shores of Lake Nipissing for 20 miles, and reach Sturgeon Falls. The railway crosses directly over the falls of the Sturgeon river. Sudbury is reached, famous for its copper and nickel mines. Large quantities of the ores are seen in the cars along the railway sidings, and the smoke from the smelting furnaces can be seen a distance away above the tree tops.

We now strike out across a wild country towards Lake Superior. The scenery is fine, and in places extremely interesting. We move on through the rocky hills and forests, passing hundreds of lakes which swarm with fish; the forests are full of game, the lordly moose, cariboo, red deer and bears of the large sort, and of smaller game, hares, swan, geese, ducks, partridges and quail. Of fur-bearing animals, there are the silver-gray, red and black fox, the otter, marten, mink and beaver. The climate is clear, bracing and healthy.

Biscotasing is situated on an extensive and irregular lake, and is a fine district for trappers, who obtain the pelts of the fur-bearing animals here in quantity.

The sun is now sinking fast, and soon after supper I turned into my berth and tried to go to sleep, but the first night in a sleeper one seldom gets a good night's rest.



CHAPTER III.

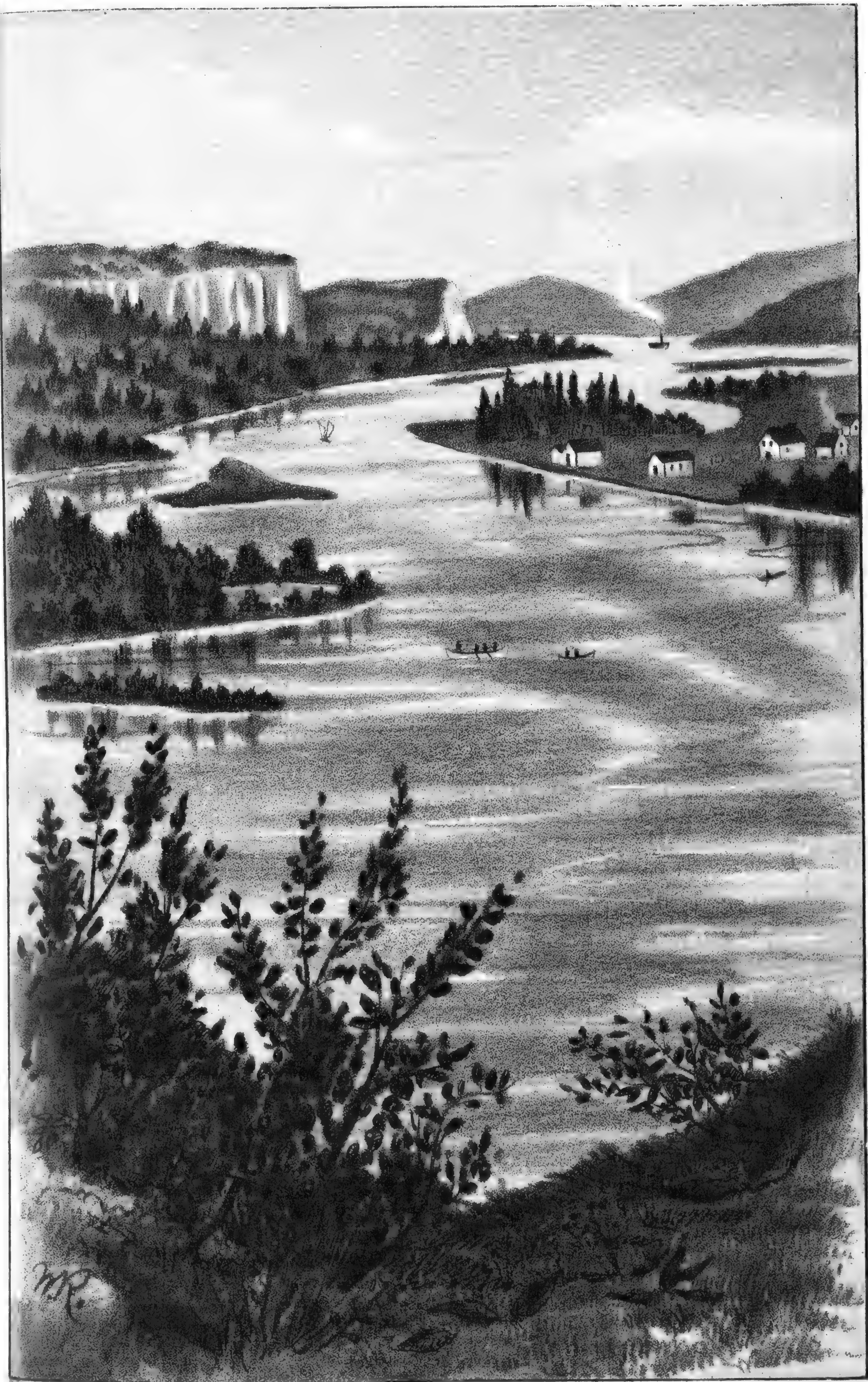


N awaking next morning, we find we have reached Heron Bay, on the north-east angle of Lake Superior, and soon we are running along the shores of the lake. The scenery is very beautiful, and for hours we look out upon the lake, its face now still and smooth, and dotted here and there with white sails. At times we are back from the lake a mile or more, and high above it amongst the rocky hills; again we are running along the cliffs on the shore as low down as the engineers dared venture.. For sixty miles the railway is carried through and around the bold promontories of the north shore of Lake Superior, with its deep rock-cuttings, viaducts and tunnels constantly occurring. In some places the line is cut out of the face of the cliffs, and as we glide along the ledges, we look down upon the lake from the dizzy heights above. No part of this wonderful scenery should be missed by the traveller, who will be impressed by the extraordinary difficulties that had to be overcome by the men who built the line.

Rocky streams, with numerous waterfalls, find their way down from the mountains, and empty themselves into the lake, and we are seldom out of sight of dancing rapids or foaming cataracts. At a small station, the engine stops to get a supply of water, and two of us get off the train and wander a couple of hundred yards away from the railway track; there a pair of white-throated sparrows were noisy and evidently had a nest, but before we could find it, the engine bell began to ring, and we had to hastily retreat and make a jump for the train as she began to move off.

We now reach Jackfish Bay, and the great sweep around the bay is particularly fine. This is a great centre for fishing, and the evening train going east to Montreal and Toronto always stops to take a carload of white fish and large lake trout. A

short distance from the railway track an Indian has his wigwam, and he is mending his net, while his two squaws are gathering wood for a fire. Down on the beach is his canoe; and there are two fishing boats out on the lake. The panorama here is very extensive, and the train goes slowly up the incline in rounding Jackfish Bay. In a tree a short distance from the track, a pair of large buzzards have a nest; one of the birds is perched on a bough close to the nest, and simply flaps his wings, but did not leave his post; the other bird was sailing over the tree top. From their dark plumage and feathered legs, I took them to be rough-legged buzzards; how I wished the train would come to a standstill for ten minutes so as to allow me time to examine that nest, but on we go, and soon reach Schreiber, where the train stops fifteen minutes for refreshments, and we partake of breakfast. Beyond Schreiber, a chain of islands separates Nepigon Bay from Lake Superior; the lake is shut out from our view, and we appear to be running along the banks of a river with rocky cliffs on the opposite side, reminding one of the Hudson river. The constantly changing views on Nepigon Bay are charming. All the streams emptying themselves into Lake Superior contain speckled trout in plenty, and Nepigon river is noted for its six-pound trout and its beautiful scenery. The river is crossed by a fine iron bridge just before we reach Nepigon station. Three miles beyond, the railway turns around the base of Red Rock. The white houses of the Hudson's Bay post come into view. Near by are fine cliffs of columnar trap, and in the distance we see a steamer coming up the river from the lake, bringing supplies to the Hudson's Bay post. This river has become of late years a resort for anglers. The trout are magnificent, and in June and July are caught in astonishing numbers; six and seven pounds are ordinary sizes. There is, too, a peculiar delicacy in a trout caught by your own rod, and cooked before the fire on sticks—spatch-cock fashion—within ten minutes after it has left the water. The fish bite best when the flies do, and are caught at the foot of any swift rapid. In the eddy, under logs half hid in creamy foam, or in



holes over which the current runs swiftly, lie the big trout, ready to dart at the gaudy fly.

At Red Rock, we see several Indians in their canoes. Upon the waterways, the red man's conveyance has invariably been the birch-bark canoe, and nothing has ever been constructed by man more perfectly adapted to the purpose required. A skin of the tough outer bark of the white birch, sewed together with the fibrous roots of the spruce, tightly stretched over a thin lining and ribs of cedar, the seams daubed with the resinous gum of the pine or tamarack—such is the Indian canoe—light, strong and buoyant, simply constructed and easily repaired. Modelled somewhat after the fashion of a duck's breast, it floats like a bubble on the water, easy to be upset by a novice, but in experienced hands it is the safest of crafts, and it is of all the most picturesque, exquisitely graceful in form and curvature, the varied orange and brown of its exterior contrasts brightly with the transparent reflections of the river. Stealing noiselessly along by the banks of a river, under the overhanging branches, or appearing unexpectedly round a point, it forms just the spot of colour, and touch of life and human interest, which make the wild and lonely scene a picture. Leaving Red Rock, the railway takes a straight course for Port Arthur, and we soon get delightful views of Thunder Bay. The scenery here is more diversified and beautiful than any we have yet seen. The wide, emerald-green waters of Thunder Bay are enclosed by abrupt black and purple basaltic cliffs on the one side, and by hills rising one above another on the other. Here the Kaministiquia river, broad and deep, emerges from a dark forest, and joins the waters of Lake Superior, giving little token that a few miles back it has made a wild plunge from a height exceeding that of Niagara itself.

Arriving at Port Arthur, we leave the train for a short time, and view the surrounding country from an elevation close by.

Before us is Thunder Bay. At its entrance is Thunder Cape, the extremity of a long, rocky peninsula, rising abruptly to

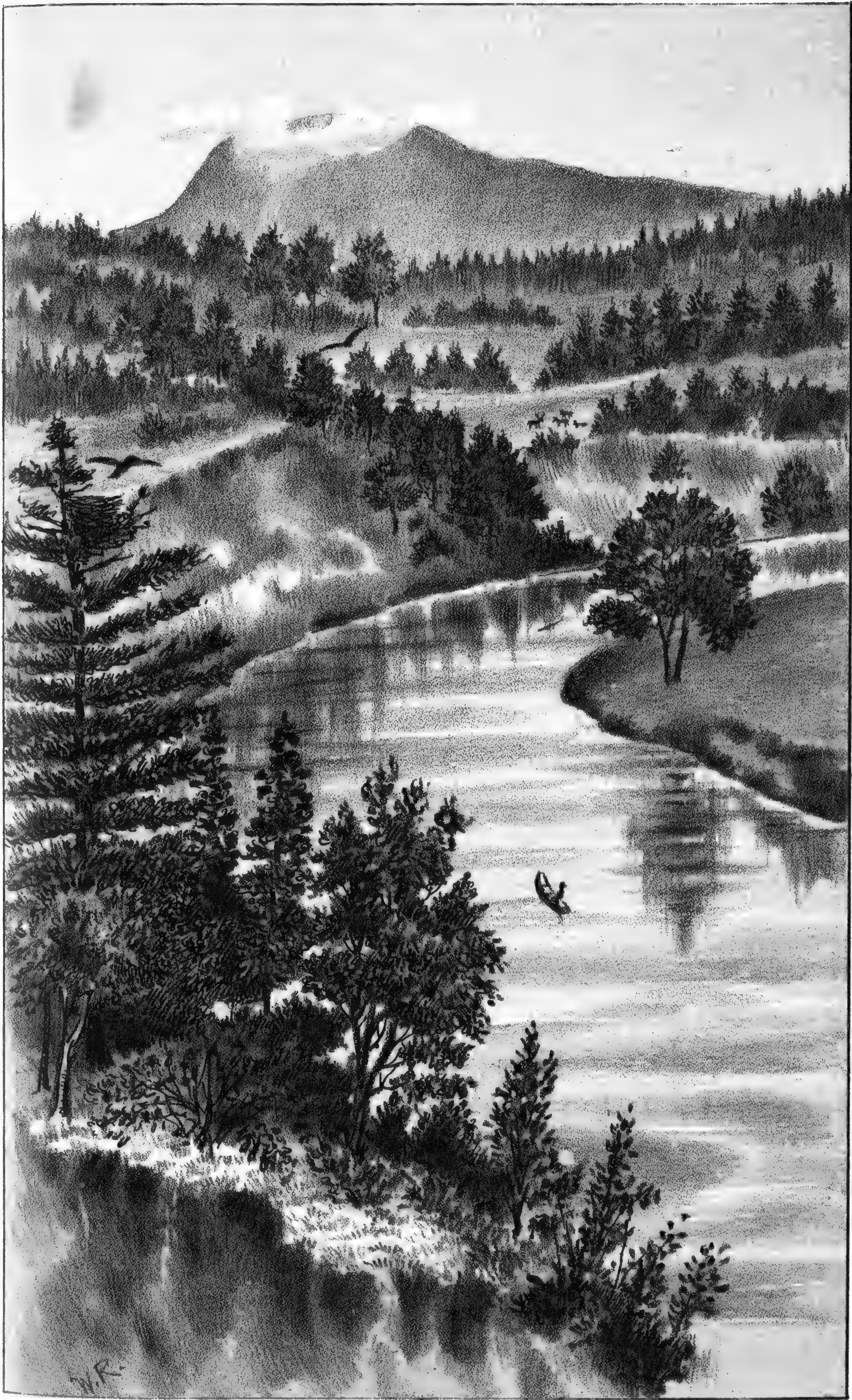
a height of thirteen hundred feet, with its summit hid in the clouds. For years a pair of golden eagles have had an eyrie at the north side of Thunder Cape, but as the nest is inaccessible either from above or below, the birds rear their young in safety. The birds are to be seen every spring hovering above the cliff near their eyrie. To the west, twenty miles away, we can plainly see McKay's Mountain. Pie Island lies in the mouth of the bay like a huge monitor at anchor. These three gigantic upheavals dominate the scene, and sit in massive dignity, superior to all surrounding objects. At the hotel at Port Arthur are a fine pair of perigrine falcons, taken from a nest in a cliff on Pie Island. The duck hawk is somewhat plentiful in this district, and a native Ornithologist of Port Arthur informs me he knows of several nests. They are usually built in the cliffs, and are only reached by the aid of ropes, and with great difficulty and risk, hence the eggs of this bird are scarce in collections, and will continue to be so. There are very few Oologists who possess eggs of this falcon which are collected on this continent; most of the eggs of this species in collections are from Europe, where the birds are more plentiful. The eggs of the peregrine falcon are very beautiful. I have a series of twenty eggs before me: they vary much in colouring; some have a creamy or pinky white ground, heavily mottled and blotched with reddish brown of different shades, in some cases the rich markings almost conceal the ground colour. The usual number of eggs found in a nest is four, sometimes only three are laid. The train is now ready to start, and the cry is heard, "all on board!" and we run on to Fort William, three miles west of Port Arthur, where one hour is allowed for dinner.

Port Arthur and Fort William have a population of about six thousand, and are the chief lake ports of Lake Superior. Large numbers of steamers and other lake craft arrive and depart daily. The fine steamships of the Canadian Pacific Company ply between here and Owen Sound. At Fort William are some of the largest grain elevators in the world.

The train runs along the banks of the Kaministiquia River



THUNDER CAPE, LAKE SUPERIOR



POINTE DE MEURON.

for some miles; the river is broad and deep, and the scenery is very interesting as we pass the foot of McKay's mountain. Some miles further on we touch the river again at Pointe de Meuron, and look down upon it flowing swiftly between high wooded banks. In a tree-top overlooking the river a pair of large hawks have their nest, and the passing train disturbs the birds. Turning a corner sharply, some deer are seen a mile away in the distance, which ran off on the approach of the train.

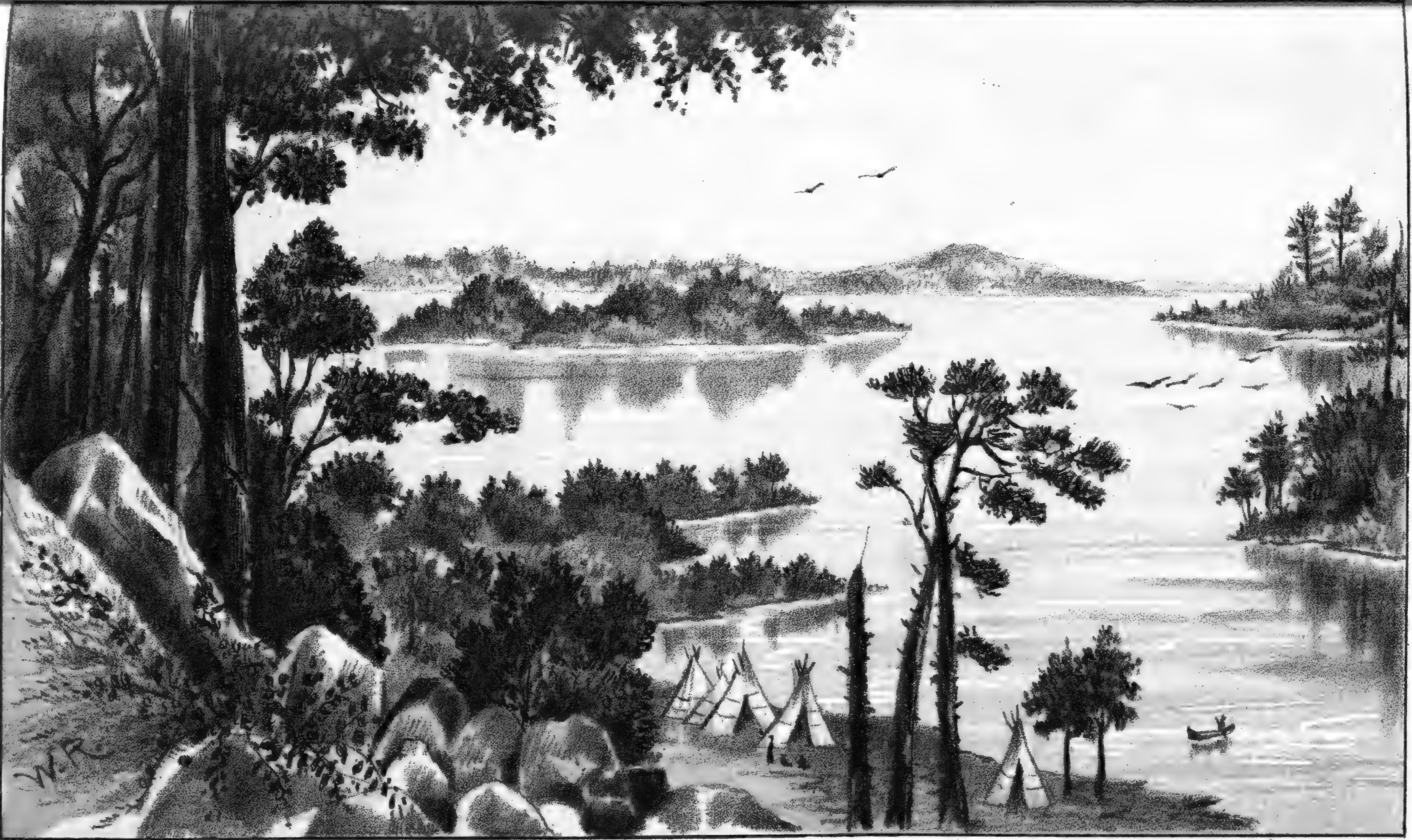
At Linkooping a couple of Indians signal the train to stop, and were taken on board with their canoes. At Savanne, 11 miles further, one of their canoes came to grief by striking a telegraph post, and became a total wreck. The train stopped, and the Indians got off and were joined by other Indians who were at the station. I picked up a piece of birch bark from the broken canoe and took it along with me as a memento of the event. There is a tribe of Indians at Savanne, and the chief, a tall, grey-haired man, was at the station to see the train pass through. We saw a number of their birch-bark canoes along the banks of the river. There are also a couple of boats that were used by Wolseley in 1870, when he led an army from Fort William to Fort Garry (now Winnipeg), to suppress a rebellion of the half-breeds on Red River.

Leaving Savanne we move westward and enter a wild, strange country, with rapid rivers and numerous lakes. Here a wilderness of interlaced lakes, or rather huge tarns in granite basins, fringed with forests, divides the country with primitive rock and almost bottomless muskegs. Over this vast region silence and desolation reign supreme. A semi-arctic winter clings to it for seven months in the year. For two hundred and fifty miles not a dwelling is seen except the station houses, at a distance of ten to fifteen miles apart. The railway track is bounded on both sides by dense forests, and scarcely a bird or any living creature was to be seen. The country is so monotonous that we are glad when evening closes the scene and we climb into our bunks, and after several efforts we manage to close our eyes in sleep.

CHAPTER IV.



T five o'clock next morning we arrive at Rat Portage, which has a population of one thousand, and several large saw mills, the products of which are shipped westward to the prairies for the use of the farmers in building their homesteads. The country about here is very rocky and the scenery is of the wildest description, and deep rock-bound lakes are always in sight. The Lake of the Woods is the largest body of water touched by the railway between Lake Superior and the Pacific, and is famed for its beauty. It is studded with islands and is a favorite resort for sportsmen and pleasure-seekers. Except towards the south-west, where a wide "traverse" of open water makes the Indian scan the sky before he ventures out in his canoe, it is so filled with islands that to the tourist it appears a wondrously beautiful river rather than a lake. Land and forests are around him all the time. The traveller now gets a glimpse of the beautiful, after passing through hundreds of miles of unutterable dreariness. He is near the dividing line of the Laurentian and the alluvial regions; and before he bids farewell to the Laurentides they burst into scenes of rare picturesqueness. At Rat Portage the Lake of the Woods is drained by the Winnipeg river, which forms numerous cascades and water-falls in its descent. At the eastern falls the river, compressed between beautifully-stained granite rocks, rushes impetuously into a boiling caldron, at the side of which is a quiet eddy where an Indian is seen with a hand net scooping up magnificent white fish. The western fall is a long, broad rapid with a drop of five feet. These falls are only the first of an almost interminable series of rapids and cataracts down which the river leaps on its way to the great Lake Winnipeg. A canoe trip with Indians from Rat Portage down to Lake Winnipeg is frequently taken by



LAKE OF THE WOODS.

a friend of mine who lives in Winnipeg. He describes the scenery as being exceedingly fine, and the sport along the banks of the river and amongst the numerous islands is very good. Here he has shot bears, deer, foxes, and smaller animals which now adorn his museum in Winnipeg.

Leaving Rat Portage, for fifty miles we pass through a lake district. The lakes are all wooded, with numerous rocky islands, the same character as the Lake of the Woods. After passing Whitemouth river the railway leaves the Laurentides and strikes through swampy woods, the country flattens out and gradually assumes the characteristics of the prairie. In the vicinity of Rennie and Monmouth stations the forests abound with game, and it is an excellent country for Moose, the greatest of Canadian deer. Black bears are also numerous, and I saw several alive in Winnipeg that had been captured in these forests. My Winnipeg friend was once shooting birds in the woods when he suddenly came across a couple of bear cubs a few day old; they were huddled together on the ground under some bushes. As the old bear was nowhere to be seen, and had evidently gone out in search of food, he decided to take the cubs along with him, and taking one under each arm he turned back in the direction of the station, three miles away. Threading his way through the forest, he came across a track used by hunters, and had only proceeded a few hundred feet when a savage growl caused him to glance a-head, and there facing him was the mother bear. His heart began to throb, although he had frequently met bears before, and his trusty rifle had always proved a friend to him on many such occasions. The bear was only thirty feet from him, and its growl caused the little cubs to squeal. The mother bear with a savage growl rushed at the robber of her offspring. As quick as a flash he flung one of the cubs at its mother, and springing aside he darted away through the trees and reached the path beyond the bear, which was now smelling at and fondling its cub. He then dropped the other cub, and raising his rifle took aim at the mother bear. As soon as she saw him she charged down upon him

savagely ; crack went the rifle and over rolled the bear, but she was soon up on her feet again, he had only broken her front paw, but still she renewed the attack. He again fired and missed, and as matters were growing serious he took to his heels, and as the bear had to run on three legs he soon left her far behind, and reached the station in safety.

The woods in this district abound with ruffed and spruce grouse. The great grey owl also inhabits these forests. I have a beautiful specimen that was shot here by my friend two years ago; as it was shot late in May, there is no doubt but that they nest in the district. The train has now arrived at East Selkirk, and we suddenly emerge from among the trees and enter the wide, level valley of Red River of the North, and in a little while we cross the river on a long iron bridge, and enter the magic city of Winnipeg.

Here we part with the friends we have made on the journey from Toronto, and, gathering our baggage, we are escorted to the Manor House by one of the hotel waiters, and after enjoying a refreshing bath and change of linen we take dinner, and then go out to see the sights of the city of Winnipeg. Every one should stop for a day in Winnipeg; it is a pleasant change after spending three days and nights in the railway cars. Notwithstanding all you have been told about this city you can hardly be prepared to find the frontier trading post of yesterday transformed into a city of thirty thousand inhabitants, with miles of imposing structures, large hotels, banks and theatres, with beautiful churches, schools and colleges, and tasteful residences, with immense mills and manufactories, and with all the evidence of wealth, comfort and cultivation to be found in cities of a century's growth. The population of Winnipeg in 1870 was 100, now it exceeds thirty thousand. Winnipeg is London or New York on a small scale. You meet people from almost every part of the world. The city is still growing fast, and Winnipeggers, in referring to the future, never make comparisons with any city smaller than Chicago. Winnipeg is well situated, just where the forests end and the vast prairies begin, with thousands of

miles of river navigation to the north, south and west, and with railways radiating in every direction. From here the wants of the people of the west are supplied, and this way come the products of their fields, while from the far north are brought furs in great variety and number.

Winnipeg is a very good centre for a sportsman to start from, for by driving out a few miles on the prairie along the banks of the Red River any quantity of prairie chicken and grouse and ducks may be had. Every hotel in Winnipeg possesses a few fine heads of buffalo, musk ox, moose or cariboo, and other deer. In no other city have I ever seen such a display of the heads and antlers of these noble animals. A few miles out of Winnipeg is a herd of buffalo in a park, half domesticated; these are the only ones known to be alive in the North-West. I called upon the well-known Taxidermist of Winnipeg, and found him busy preparing a lot of handsome heads of deer, moose, bear and buffalo. He takes over a shipment every fall to London, England, when he realizes as much as £50 each for heads of moose, musk ox and buffalo. He has the finest collection of heads and antlers I ever saw. I have a large case of owls he shot in the neighborhood of Winnipeg, comprising the great grey owl, snowy and hawk owls; these species are not at all rare in the district, and he knows of several instances of these birds breeding a few miles north of Winnipeg, towards the mouth of the Red River.

He wanted me to go down the Winnipeg river with him to try and shoot a pair of bald and golden eagles. He had found their eyries a month previously. As I knew it would be too late for eggs and it would take four days to complete this expedition down the Winnipeg river, and as I was anxious to reach the western prairies I had to decline his offer to take me to the nests of these birds. He found the eyries of the bald and golden eagles early in May, while on a shooting trip; they were built on the face of a cliff on a ledge, and the spot could be easily seen from his canoe, on account of the rocks being white-washed by the droppings of the birds below the eyries. The nests were about a mile apart and both in similar situa-

tions; the birds were very wary and kept out of range of his gun. I have a set of two eggs of the bald eagle that were collected on March 18th, 1884, they were taken from a large nest built in a pine tree 60 feet high, on the southern shore of Lake Winnipeg. A set of two eggs were taken from this same nest the year previously; this shows that the bald eagle is an early breeder even as far north as Winnipeg. In Florida the bald eagle is a very early breeder. I have two clutches of eggs that were collected on January 19th, 1883. The golden eagle does not commence nidification so early as the bald eagle, and seldom lays its eggs before April, except in California where the eggs are sometimes taken in March. I have a clutch of two eggs that were collected in Santa Clara county, California, on March 17th, 1890, and another clutch taken in the same district on March 22nd, 1890; a third set was taken in California on April 16th, 1889. The golden eagle breeds in the mountainous portions of Canada and the United States, usually selecting for its eyrie some inacessible cliff, but, strange to say, in California the golden eagle seems to prefer to make its nest in oak trees. The above mentioned three clutches were all taken from oak trees; the nests were large structures of sticks, leaves lined with grass, leaves and straw, and were built near the tree tops, from thirty to seventy feet from the ground.

In Canada, Europe and Asia Minor, the golden eagle invariably makes its nest in a cliff. This species frequents boreal regions, and is known to breed amongst the mountains of Quebec and near Port Arthur and Thunder Bay on Lake Superior, and also in the rocky mountains of British Columbia.

The eggs of the golden eagle are larger than those of the bald species. I have in my collection a series of thirty eggs, out of this number only one is white like a bald eagle's egg. Three of the largest specimens measure 3.19x2.39, 3.12x2.38, 3.10x2.38, and three of the smallest measure 2.78x2.10, 2.78x2.06, 2.75x2.12. The eggs of the golden eagle as a rule are not richly spotted or blotched like those of the red shouldered and other hawks; the general appearance is whitish, or creamy, freckled, spotted or mottled with grey and various shades of brown.



GOLDEN EAGLE & EYRIE

Out of a series of thirty eggs, selected from some fifty specimens that have passed through my hands these last five years, only four clutches can be called richly marked. Most of the spots and blotches are more or less obscure and apparently below the surface, showing various tints of purplish grey, drab, and pale brown. by the overlaying of the whitish calcareous matter—these four clutches may be described as follows :—

Clutch I.—Two eggs, size 2.90x2.30 and 2.80x2.32, ground colour creamy white, freckled all over with pale brown and drab; towards the small ends of the eggs are heavy daubs of deep purple grey, and on the top of those are blotches of chestnut and sienna brown. This handsome clutch was taken in the mountains of Asia Minor, from a nest in a high cliff, on April 10th, 1887.

Clutch II.—Three eggs, size 3.00x2.28, 2.95x2.24 and 2.80x2.13, ground colour clear white, with heavy spots and blotches of various shades of grey and dark brown; the ground colour is so clean and free of freckles, that the heavy blotches stand out very bold. This set was also taken in the mountains of Asia Minor, April 10th, 1887.

Clutch III.—Two eggs, size 3.12x2.28 and 2.97x2.33, ground colour pinky cream, mottled all over with purple grey and pale brown, which almost conceals the ground colour. This clutch was taken near Sargent, California, April 16th, 1889, from a nest in a live oak tree, 35 feet from the ground.

Clutch IV.—Two eggs, size 2.82x2.14 and 2.90x2.03, ground colour greyish white, the eggs are streaked horizontally from the largest end to the middle with purple grey, on the top of this are spots and blotches of sienna brown, one of the eggs is very handsome. They were collected in Santa Clara Co., Cala., March 22nd. 1890, nest in a white oak tree 70 ft. high.

Behind the Albion hotel at Winnipeg, the proprietor has a small menagerie. It contains several fine specimens of black bears, prairie and timber wolves, and different kinds of deer, all obtained within this district.

One striking feature in Winnipeg is the primitive clumsy-looking carts drawn by long-horned oxen, harnessed with buckskin. This is a strange sight to easterners. Here milk carts, farmers' waggons, etc., are drawn by oxen, which are also used in the fields for ploughing instead of horses.



CHAPTER V.

HAVING spent a day and night in viewing the sights of Winnipeg, the following afternoon found us seated in another car, and now for the last stage of our journey. Looking through the train we find but few of our fellow passengers of yesterday. Nearly everybody stops at Winnipeg for a longer or shorter time, some to remain permanently, others to purchase supplies or materials for their new prairie homes. Leaving Winnipeg, we strike out at once upon a broad plain, as level and green as a billiard table, extending miles to the north and west and bordered on the south by a line of trees marking the course of the Assiniboine river. This is not yet the prairie, but a great widening of the valleys of the Red and Assiniboine rivers which unite at Winnipeg. The plain is dotted with countless cattle, half hidden in the grass. The railway stretches away before us without a curve as far as the eye can reach, and the motion of the train is hardly felt as we fly along. A belt of almost unoccupied land surrounds Winnipeg, due to the fact that it is mostly held by speculators, and the few scattered farms are chiefly devoted to dairy products and cattle breeding. Beyond Poplar Point, farms begin to appear almost continuously, and for 130 miles the railway follows the course of the Assiniboine river. We are on the alert for the sight of birds, which now appear to be numerous. As we travel along we disturb the ducks from every slough; Franklin's gulls and black terns are in sight most of the time, and sandpipers and snipe are seen on the margin of every small sheet of water,

One of our fellow passengers, who came up with us from Toronto, asks us to have a game at checkers, to pass the time away, but we respectfully decline, informing him we are too much interested in the country. "Why," says he, "I don't

see anything to interest anybody, there's nothing but a flat expanse of monotonous prairie, and I am sick of it already; I don't know how I shall stand two or three days of it." We try to interest him in the birds to be seen from the car window, but his admiration does not lie in this direction, so two of us leave him and go out and stand on the back platform of a car, and enjoy a rich cigar and the surroundings. Every prairie stream, or slough, has its brood of young ducks, just hatched and swimming about, while their mothers fly off on the approach of the train. There were shovellers, ring-necked ducks, American widgeons, redheads, pochards and blue-winged teal, all easily recognized. Marsh harriers were plentiful, and one appeared in sight every few miles. An occasional short-eared owl would be flushed from the rushes of some slough. It was soon evident that the prairies swarmed with bird-life, and how eager we were to explore some of these sloughs. As we proceed westward, we imperceptibly reach higher ground, and the country is checkered with fields of green wheat, just a few inches high. Fifty-five miles from Winnipeg, we reach Portage-la-Prairie, noted for its big grain elevators and flour mills. From this place Lake Manitoba is reached. In the fall, ducks, geese and water birds congregate here in myriads. Lake Manitoba is about ten miles north of the railway track, and is bordered by a belt of forest inhabited with numerous bears, moose, elk and black-tailed deer. From Portage-la-Prairie a new railway reaches two hundred miles away to the north-west to Yorkton, which will take the naturalist or sportsman to the foot of the Riding and Duck Mountains and Beaver Hills. Here are found bears, moose, lynx and wolves in numbers. Near Yorkton is Crescent Lake, which swarms with bird-life, and from here last summer I received a fine collection of eggs taken on the shores of Crescent Lake. The little brown crane breeds at Crescent Lake. I have two fine sets that were collected here last spring. The eggs of the little brown crane are large and handsome, they are at once distinguished from the whooping and sandhill crane by their smaller size, but are similar in colour and markings; their colour

is ashy yellow, drab-blotched and clouded, chiefly at the larger ends, with different shades of brown and purple grey. One set of two eggs collected at Crescent Lake on May 20th, 1890, measures 3.60x2.30 and 3.64x2.32. The nest was found on a sandy knoll in a marsh, and was a large structure of broken-down reeds and aquatic plants; the bird was flushed off the nest. Another set of two eggs in my collection from Crescent Lake only measure 3.56x2.28 and 3.59x2.30. They were collected on May 16th, 1890.

Between Portage-la-Prairie and Brandon we pass many villages at distances of ten and twenty miles apart. After passing through a bushy district of scrub oak, with frequent ponds and small streams, alive with birds, the railway rises from Austin along a sandy slope to a plateau near the centre of which is situated Carberry, a fine district for the ornithologist. From Sewell the railway descends again to the valley of the Assiniboine, and Brandon is reached. Next to Winnipeg, Brandon is the largest town in the North-West, with a population of 5000. The town is beautifully situated on high ground and overlooks the valley of the Assiniboine river. In the *Ornithologist and Oologist* for July, 1885, published by F. B. Webster, are notes on the birds found around Brandon by the late T. B. Wood. Mr. Wood was an enthusiastic naturalist, and unfortunately fell a victim in the cause of his favourite pursuit. One day, late in October, 1883, having shot a rare duck in a slough, he waded into the water up to his waist to get the bird, and thereby contracted a severe cold which resulted in his death. Mr. Wood was an Englishman, from Manchester, and only twenty-six years of age when he died. His notes were sent to his friend, T. H. Nelson, in England, who communicated them to the *Zoologist.* It was through reading his notes that I was prompted to visit the North-West; his field notes on the birds of this district are highly interesting.

Leaving Brandon, we have fairly reached the first of the great prairie steppes that rise one after the other at long intervals to the Rocky mountains, and now we are on the real

prairie, not the monotonous, uninteresting plain your imagination has pictured, but a great billowy ocean of grass and flowers, now swelling into low hills, again dropping into broad basins with gleaming ponds, and broken here and there by valleys and by irregular lines of trees marking the watercourses. The horizon only limits the view, and the short, sweet grass is studded with brilliant flowers; every minute or two prairie chickens and plover rise from the grass, startled by the passing train. Ducks of many kinds are seen about the frequent ponds, together with Canada geese and occasionally cranes and pelicans. The sun is setting, and towards the north the horizon is a long black line of smoke. On enquiry from the railway guard we are informed that "it is a prairie fire." As it approaches, we can see the fierce blazes running along as fast as the train; as it gets darker, the sight becomes fearfully grand, for miles to the north the prairie is illuminated by the fierce, raging fire, but as the wind is blowing from us the fire recedes and we are not sorry at leaving it behind. It is now dark and we retire to the dining-car and indulge in a supper of bottled ale, crackers, butter and cheese. A short time afterwards we turn into our bunks and instruct the railway guard to wake us up before we reach Regina in the morning.



CHAPTER VI.

NEXT morning I was wakened by the guard pulling me, and calling out, "It's five o'clock, sir, Regina next station." I was soon up and washed and dressed. At Regina, my Scotch companions, just out from Scotland, got off the train; they were going to take up farms a few miles south of Regina. Regina is the capital of Assiniboia and the distributing point for the country far north and south. A railway extends northward to Long Lake, beyond the Qu'Appelle river, and now almost reaches Battleford, on the North Saskatchewan. Regina is the headquarters of the North-West Mounted Police. The Mounted Police is a military organization numbering 1,000 men, who are stationed at intervals over the North-West to look after the Indians and preserve order generally. Along the sides of the railway track about Regina are numerous Indian tepees, and Indians are seen driving their herds of ponies. They look very picturesque in their coloured garments, and we begin to realize that we are in a wild country and in the midst of the home of the red man; however, they live very peaceful lives, but are very indolent and don't like much work; the squaws do all the work, while the bucks lie around and smoke and talk.

The Mounted Police board the train at Regina and examine all the baggage to see if any of the passengers have whiskey. They are very strict, for the Indians are fond of fire-water and are dangerous when they get it. A few miles north of Regina is Long Lake, a rendevouz for a great variety of water fowl, and a place I intended visiting, but did not manage it as my time was devoted to exploring the region about Moosejaw and Rush Lake. However, I hope to explore Long Lake on some future trip.

Forty miles beyond Regina we reach Moosejaw, which is 400

miles from Winnipeg. This was my destination. I was glad to get out of the train. Many Indians came from their camps to meet the trains, and offer for sale buffalo horns, which they collect on the prairies and polish them. I bought a fine pair for seventy-five cents. I secured a comfortable room at the station, and before breakfast I went out to view the neighborhood to see what the prospects were for collecting specimens. The name Moosejaw is an abridgement of the Indian name, which, literally translated, is "the-creek-where-the-white-man-mended-the-cart-with-a-moose-jaw-bone." Moosejaw is a small market town with a population of 600. Running through Moosejaw is a creek which empties itself into the Qu'Appelle river. To the south of Moosejaw the creek runs through some swampy ponds, fringed with willow bushes, and I soon found out that this was a paradise for birds. It was early morning, and the place was alive with curlews, godwits, killdeers and other birds that had come down from the high prairies to feed. Beyond the ponds the creek drains a deep wooded valley. This is the only place for miles around where trees grow, and consequently swarmed with bird-life. Arctic towhees and vireos were numerous, also warblers and thrushes were singing merrily. I hastened back to breakfast, satisfied that I had struck a good collecting ground. Breakfast over, I put on my long rubber boots and went to explore the ponds south-east of Moosejaw. The curlews and godwits had left, but killdeers were very numerous, and there were several pairs of those handsome birds, the Wilson's Phalarope. Black terns were numerous, and as I approached began to fly around screaming, so I concluded they had eggs and nests on some of the numerous islands fringed with rushes and willows. On the far side of the ponds are clusters of bushes, and on approaching, numerous bronzed grackles appeared and became noisy. It did not take me long to find a number of their nests; they were bulky structures made of twigs, roots and grasses mixed with mud and lined with dry grass, and every bush contained from one to three nests. I had soon a number of fine sets, and as they were the first I had ever taken of this

species, they were greatly appreciated, although for two weeks afterwards I found them so common that I could have collected hundreds of their eggs, had I wished. Many of the nests contained young birds, as the grackle is one of the early breeders; they begin to lay in this district about the second week in May, and eggs can be found up to the middle of June. The eggs of the bronzed grackle are very handsome, and a large series make a fine display, and they vary greatly in colour: some have a pale green or blue ground colour, with irregular lines, dots, scrawls and blotches distributed over the surface, others have an olive green ground, mottled with brown of various shades, in some the ground is almost concealed by the numerous markings. Their average size is 1.20x.80, and from four to six eggs were found in each nest. I collected a fine series, and carefully packing them I proceeded along the far side of the ponds up the valley. Rose-bushes and honeysuckle were in full bloom, and sent forth a delicious perfume. The air smelt fresh and sweet, and the morning air was so bracing, it was a pleasant change after being caged in a railway train for nearly a week. Carolina crakes, American widgeons and shovellers were numerous on the ponds, and I began to wonder if I should be able to procure a boat to examine the numerous islands. I saw many nests of king birds, and red-winged starlings in the bushes on the islands, but could not reach them. My next find was a cat-bird's nest and five eggs, and a robin's nest with eggs. A waxwing flew from a tree close by, but I could not make out whether it was the Bohemian waxwing, or only the cedar bird, as I soon lost sight of it. I do not think the Bohemian waxwing is found so far south in summer, although a native sportsman of Moosejaw afterwards informed me that he has shot this species in the fall and winter, when they appear in flocks. They breed in Alaska, and may do so further south. Thirty years ago, the eggs of the Bohemian waxwing were unknown. The late Mr. Wolley was the first to discover them in Lapland, in 1856. Duplicates from his collection were sold at twenty-five dollars each. Eggs of this species are still rare in collections.

This past five years I have received a number of sets from Lapland. Two clutches of five eggs and one of four in my collection, were collected in Lapland, June 20th, 1888. The nests consisted of twigs, roots and grasses, built in low trees. The eggs are like those of the cedar bird in colour and markings, but are considerably larger, averaging 95x65. A clutch of four eggs that were collected for me in Finnland, June 20th, 1885, are now in the collection of Chas. E. Doe, of Providence. The eggs measure 1x:70, .99x70, .95x69, .93x.68.

One of the commonest birds in Moosejaw valley is the arctic towhee, I could hear several calling at once, every time I visited this valley, their nests are hard to find, however. In passing some shrubbery I flushed one from amongst the roots, and there found a nest built flush with the ground. It was made of dried grass, similar to the eastern towhee bunting; it contained four eggs of a greenish white ground colour, freckled with reddish brown. Moosejaw creek is well wooded with small elms, oaks and other trees, and has a thick undergrowth of brushwood along its banks. Nearly every tree of size contains a hawk's nest or that of an owl. I was surprised to find so many hawks' nests in such a small area, but it is easily accounted for, because the conveniences for nesting in this district are limited to these narrow valleys. There were always several hawks to be seen hovering over the valley, and Swainson's buzzard was the most plentiful. One flopped off a nest on my approach, and I was soon up the tree peeping over the edge of the nest, and was delighted to find it contained two eggs; they were white, blotched with reddish brown, and are smaller than the eggs of the red-tail hawk. I was on the wrong side of the stream for the hawks' nests, so I climbed up the steep banks of the valley and reached the high prairie south of Moosejaw. Here field plovers and killdeers were plentiful, but I did not find their nests. The prairies around Moosejaw are very hilly, and this is what they call the rolling prairie. With the exception of the small trees growing at the bottom of Moosejaw creek, the country is treeless from Regina west to the Cypress hills, a distance of 200 miles. The hilly prairie is

covered with short buffalo grass, and the county has a desolate, barren look. The ground is undermined with gopher holes, and the bones and skulls of buffalo are scattered in all directions over the prairie. The dark clouds that had been threatening for some time now broke and it began to rain, so I descended into the valley. As it was near twelve o'clock, I made my way to the station and found dinner ready, to which my keen appetite did justice.

After dinner, as the rain abated somewhat, I put on my waterproof coat and made my way to the ponds once more, and this time tried the north side, here I found a raft and was soon on it and paddling towards the islands where the black terns were noisy. On arriving there I was surprised to find no eggs, but it was evidently too early, for ten days after that I found black terns just beginning to lay at Long Lake in Manitoba. The islands were fringed with rushes, and I found several nests of the red-winged starling containing four and five eggs each; the nests were attached to several stems of rushes, were cup-shaped and made of dry grasses. I also found a nest of rusty grackle ready to receive eggs, it was made of dry grass on the ground on one of the islands. Wilson's Phalaropes were numerous, and I worked hard to find their nests without success. Every willow bush growing out of the water contained one or more nests of bronzed grackle or kingbird, but it was too early for eggs of the latter, as the kingbird is a late breeder and seldom has eggs before the middle of June. Jumping from the raft on to the island, I almost trod upon a large bird which stumbled off and alighted in the water some distance away; it gave me a sudden start, as birds do when they fly up right under one's feet. In a tuft of long grass was a cosy nest of down and ten buffy eggs of the blue-winged teal. They were securely packed along with the other nests and eggs. In trying to jump from one island to another, I almost stepped backwards on a nest of four handsome eggs of the killdeer. I happened to see the eggs in looking behind me, previous to making the jump. The nest of the killdeer is simply a depression in the sand, lined with a few blades of

grass and bits of rushes; the eggs were clay-coloured, spotted and streaked with black. A marbled godwit evidently had a nest close by, but I could not find it. There was a strong wind blowing, and I could not go back with the raft to the place I got it from, as the wind carried me over to the south side, so I worked my way round the islands where I found several other nests of red-winged starlings, grackles and other common birds. As it was nearly five o'clock and my clothes were pretty damp, I directed my steps towards Moosejaw, intending the following morning to come back for the raft. After a wash and change of clothes, boots and stockings, I found supper was ready. In the evening I visited the house of a native sportsman, to try and learn if there were any marshes around Moosejaw, and he directed me to one five miles north-east of Moosejaw, so I resolved that I would visit this place on the morrow.



CHAPTER VII.

NEXT morning I was awake early and out before breakfast. I crossed the bridge which spans Moosejaw creek and followed the stream westward. Marbled godwits were plentiful, but their nests were hard to find. A pair were exceedingly noisy and began to fly round in circles, screaming; as I knew they had a nest near, I searched the spot, but without success, so I went away some distance and lay down on the grass. Waiting ten minutes to allow the birds to settle, I advanced suddenly to the spot where I expected the nest would be found, and this time the bird got up and ran along the ground for twenty yards, and then rose into the air screaming. I took no notice of the bird, but kept my eyes on the spot from which it rose, and advancing there I found the nest and four eggs. The nest was simply a depression in the ground, about the size of a saucer, and lined with grass and bits of rushes. The eggs were olive drab, spotted with various shades of brown and purple grey undermarkings, and are similar to those of the European black-tailed godwit in size and colour.

Along the banks of Moosejaw creek grow short shrubs, and here I flushed several sharp-tailed grouse; one flew up suddenly before my feet with a whir-whir, and I came near stepping on its nest and ten eggs. The nest was a hollow in the ground lined with feathers, and the eggs were tawny buff, speckled with fine spots of brown. The sharp-tailed grouse is a very close sitter, and will almost suffer herself to be trod on before she will leave her nest. This species is resident in Assiniboia and Manitoba throughout the winter, when they retire to the bluffs and feed on the buds of the trees, and at night they dive down into the soft snow drifts for warmth and shelter. Many are killed by wolves and foxes, and not a

few get imprisoned by the surface of the snow hardening during the night, for they bury themselves about a foot deep. Packing the eggs, I followed the course of the stream for a mile or so. Something rustling amongst the grass was making for the water, and two or three steps further I saw it was a large snake; it dived into the water, but I was too quick for him, two or three blows on the head from my stick caused him to stretch out on the surface of the water lifeless. A few steps further I disturbed another snake, and, as they seemed to be numerous along the banks of this stream, I crossed over and returned to Moosejaw and had breakfast.

Breakfast over, I took my gun, and filling my belt with cartridges, and getting a supply of provisions for the day, I hired a horse and buggy and drove over the hilly prairies to the slough some miles to the north-east of Moosejaw. On the way I disturbed numerous McCown's longspurs from the grass, but could not find their nests. I soon found it would be a difficult matter to look for nests, as the horse was too fresh and had evidently not been out for some days. Killdeers, Bartram's sandpipers and willets were plentiful, but the latter are so wary it is no easy matter to find their nests.

It took me some time to find the slough. At last I reached the summit of the elevated ridge of prairie, and scanning the surrounding country, I saw in the distance a green flat patch about three miles long by two broad, it looked like an extensive corn field with the green wheat about a foot high; I could see no signs of water, but on reaching the slough I found it covered with green rushes, which hid the surface of the water. I secured the horse's head to a rope I had brought along with me and to the other end I had attached an iron weight, as there were no trees nor fence to which I could tie the horse. I then took my gun and having put on my rubber boots I waded amongst the rushes. The place swarmed with birds; mallards, shovellers, blue-winged teals, and scaup ducks were plentiful, so were killdeers, Bartram's sandpipers and Wilsons' phalaropes. There were hundreds of yellow-headed blackbirds, whose noisy chatter mingled with quacking of the ducks and the cries of

the willets and killdeers. A short distance away on the margin of the slough, I saw a willet and a pair of phalaropes, and approaching cautiously I raised my gun, bang—and the willet dropped. He was a handsome specimen and I put him into the buggy and then followed up the phalaropes which had settled further on. I startled a small bird from the dry ground on the margin of the slough, and found a nest of five eggs. The eggs were unknown to me; they resembled eggs of the grass finch but were smaller. I afterwards found out they were eggs of that rare bird, Baird's sparrow (ammodramus Bairdii). I left the eggs in the nest, and placing a piece of wood near by as a mark; I went away in hopes the bird would return so that I could shoot her to enable me to identify the eggs. Although I stayed away twenty minutes before returning, I did not see any signs of the bird, so I took the nest and the eggs. The nest is made of dried grass and was built on the ground after the manner of the song and Savannah sparrows. The eggs are greyish white, spotted and blotched with various shades of brown, and measure 0.78x0.60. This set was taken on 8th June, and they were quite fresh. On the 14th of June I found another nest of Baird's sparrow on the prairie south of Rush Lake; it contained three eggs, and incubation was far advanced,—the nest was made of grasses and on the ground. These eggs were greyish white, finely spotted with dark brown, and they have a few hair lines of brown after the fashion of McCown's longspur, but the eggs are larger than those of McCown's longspur. A pair of yellowshanks evidently had a nest close by, so I set to work and searched diligently for over half an hour without any success, so I marked down the spot intending to return later. On the north side of the slough the ground rises on a gentle slope, and here the grass grew in tussocks. I flushed a Wilson's phalarope and soon found its nest and four eggs well concealed in a tuft of grass, the nest consisting of bits of rushes. The male bird alone undertakes the incubation and when disturbed from the nest, flutters along the ground as if winged or wounded, and as you stoop to pick him up he flutters away further and then rising in the air, be-

gins to fly over your head, uttering a soft note, something like the coo of a dove.

Wilson's phalaropes are handsome birds and the largest of the three species. They inhabit the prairies from Winnipeg to the foot hills of the Rocky Mountains, and I found them breeding at every place I stopped at between Winnipeg and Rush Lake. I had excellent opportunities of studying their habits, and I consider this the most interesting species of the entire group of waders. As a rule, in bird life, the males are larger than the females and their plumage more attractive, but in the case of Wilson's phalarope it is just the reverse: the females are much larger than the males and their plumage is far brighter. I have several specimens on the table before me, and the adult female may be described as follows: Forehead and crown, bluish silvery grey, changing into a white band down the middle of the back of the neck. From the base of the bill, across the eye and down the side of the neck, is a black stripe, changing gradually in the lower portion of the neck and across the back, into rich, dark chestnut: a short white bar over lores and eyes: chin, cheeks and under parts of the body, pure snowy white: fore-neck and chest, softy buffy cinnamon; wings, dusky brown, and middle of the back, plumbeous grey. The adult male is smaller and much duller in colour than the female, with the beautiful tints and pattern of the female faintly indicated. These birds are lobe-footed like the coot, and are good swimmers. They surpass all other waders in ease and variety of movement, and in grace and elegance of form, and beauty of plumage. The first week in June they begin to build their nests, usually not far from the margin of some lake or slough: the nests are always deep cup-shaped hollows in the centre of a tuft of grass, and are usually well concealed. The nest is lined with bits of grass or drift rushes. They are generally found by flushing the male off the nest, for after the female has laid the full complement of eggs, she leaves them, and the male alone attends to the duties of incubation, and hatches the eggs. When the young leave the shells they can soon run about, and are then fed by both

of the old birds. The male bird is a very close sitter, and will almost suffer himself to be trodden upon before he will leave the nest, then he flutters along in front of one's feet for some distance as if wounded, making a soft, squeaking noise; he then rises in the air and is joined by the female, who has been feeding in some damp spot not far off, they then fly around in circles, and are sometimes joined by two or three other phalaropes. Most sandpipers or waders have a loud whistle but the phalarope is a very quiet bird, and it has only one soft note, which can be heard only close to it. It sounds something like the coo of a dove, or the bark of a large dog a long way off. This is the only note I ever heard them utter, besides the squeak they make when frightened off the nest. When feeding or swimming about the sloughs they are very tame, and will allow you to approach within five or six yards before taking flight or running further away.

I collected a fine series of eggs of the Wilson's phalarope. They are almost as large as eggs of the spotted sandpiper, and average 1.25x0.90. The ground colour varies from pale clay to brownish drab, and is heavily overlaid with spots, blotches and scratches of brown and black, reminding one of the ptarmigan's egg in style of colouring. They have the power to remove their eggs, if they have been handled. On June the 10th, I found a nest of Wilson's phalarope, at Rush Lake, it contained one egg; this egg I examined, and then put it back into the nest, intending to call a few days later for the full set. I put some stones near the nest so as to be able to find it again. Next day I visited the nest and found the egg had gone. About thirty feet away I found another nest and two eggs, one of them I recognized as the egg I had handled the day before, the bird evidently had removed the egg to this nest and laid another one to it. On the high ground above the slough a number of Willet's and Bartram's sandpipers had their nests. The Willets were very wary, but the field-plovers were excessively tame, and when disturbed would get up off their nests and walk slowly through the grass. The Bartram's sandpiper, also called field plover and upland

plover, is a slender, graceful bird ; when disturbed they seldom take flight, but walk or run along a few yards in front of the intruder. In driving over the prairie I almost ran over several, for they do not run out of the way, until the horse is nearly upon them. They keep close together in pairs, and ramble through the grass, their long necks and heads just appearing over the top of the scanty herbage. They have a soft mellow whistle, and are called "Quaily" by the natives, as their whistle is supposed to resemble this word. The nests are simply depressions in the ground, lined with a few blades of grass.

I have a series of one hundred eggs before me, consisting of twenty-five sets, the number of eggs to a clutch is invariably four, and theyare very uniform in size, shape and colour. Tne eggs are not so pyriform or pointed as those of other plovers and sandpipers. They average about 1.75x1.28. The ground colour is pale clay, sometimes light drab or deep buff, spotted all over and thicker towards the larger end, with umber brown, they also have numerous dark, purplish-grey blotches, and paler grey shell-markings. The plumage of both sexes is very similar.

As it was dinner time, I went back to the horse and buggy, and put the eggs and birds I had collected at the bottom of the buggy, and loosened the horse so that he could feed on the grass. After having some lunch I waded into the slough and shot several yellow-headed blackbirds. They are handsome birds, the head, neck and breast is a brilliant orange, which stands out well against the rest of the plumage which is black, except the wings, which are barred with white. I did not find any of their nests; they are late breeders, and I did not collect any eggs of this species until June 19th. A pair of mallard ducks had a brood of young, and so had several shoveller ducks. On the margin of the slough a snipe rose up suddenly and darted away to the other side of the slough. It took me some time to find its nest, which was well concealed among the tufts of marsh grass. This nest of Wilson's snipe was made in the centre of a tuft of grass, and consisted

of a circular depression in the ground, lined with bits of rushes. The eggs were four in number, olive greenish brown, blotched and spotted with dark brown and purplish-grey, and measure about 1.55x1.07.

Wilson's snipe is not very numerous either in Manitoba or Assiniboia; I only found a thin sprinkling of these birds between Winnipeg and Rush Lake, they became scarcer on approaching the south, towards the United States boundary, and are more frequent towards the Saskatchewan region of the north. The male Wilson's snipe has the same habit as the European snipe of flying in circles high in the air, and dropping down suddenly a few yards with outstretched wings, which cause a drumming noise. I could almost fancy I was on some of the Yorkshire moors in England, or on Strensall common, near York, where I used to find numerous nests and eggs of the snipe, and have often lain on the ground and watched and listened to the snipes drumming high in the air. The trumpeter swan nests on the prairies north of Moosejaw, at Buffalo Lake: they are early breeders: a set of five eggs in my collection were taken on April 7th, 1891; another set of two eggs were taken on the same day. The nests were described as being large structures, three feet in diameter, and composed of sods, grass and rushes, the centres were lined with feathers and down. The eggs are yellowish white, and average 4.25x2.60. As the horse began to get restless, I drove round to the north of the slough. Here I found many species of ducks, and numerous Wilson's phalaropes, kildeers and Bartram's sandpipers. The nests of these three species were found some distance from the water's edge, upon the dry prairie. The kildeer is a noisy, wary bird, and is never flushed off the nest, like the field plover and Wilson's phalarope. As soon as their nesting quarter is approached, some male bird, who is on the look out, flies toward the intruder and begins calling out "Tewitt," and the cry is very similar to that of the European lapwing plover, being somewhat plaintive and sad: all the kildeers in the immediate neighbourhood then leave their nests and begin to fly in the air,

calling out "Tewitt," and they do not settle down until the intruder has retired to a considerable distance. These birds are very annoying, for they alarm the whole neighbourhood with their cries, which cause many of the birds to leave their nests and thus spoils the collector's chances of flushing other birds off their nests. The eggs of the kildeer are rather handsome, and a large series makes a fine display. The ground colour is usually clay, sometimes drab, thickly spotted and blotched with black and grey shell markings; some clutches have a scratchy pattern of lines and spots. In size they average 1.53x1.10. My next find was a nest and four eggs of the yellowshank, the nest consisting of a saucer-shaped hollow in the ground, lined with grass, after the fashion of other plovers. The eggs are smaller and not so broad as those of the Bartram's sandpiper, and are more pointed and pyriform. The ground colour is like some specimens of the field plover, but the markings are bolder. The eggs have a buffy clay ground, and are thickly spotted with various shades of brown, with numerous shell markings of grey.

Like the Wilson's snipe, the yellowlegs are not numerous on the prairies of Manitoba and Assiniboia; both species become more abundant northward towards the Saskatchewan region. Yellowlegs are more numerous at Bittern Lake, near Edmondton, and are common in the neighbourhood of Little Slave Lake. It was now five o'clock, and as my horse was getting restless, and kept turning his head homeward, and moving off of his own accord, I concluded to leave this charming spot and return to Moosejaw. But just then a couple of curlews arose, so I left the horse and buggy and went after them. Bang went the gun, but it was a miss this time, and the curlews flew away to some distance. I was searching the spot for their nest, when, looking up I beheld the horse and buggy going at a steady pace across the prairie. I at once gave chase, calling out, "whow, whow," as I ran along, but the horse took no notice, but kept on at a steady trot. After running quarter of a mile he began to gain on me, and I was almost out of breath running and calling on him to stop, and I found

Hudson Bay Lake
1844



KILDEER PLOVER & NEST.



WILSONS PHALAROPE & NEST.

1890

it was no joke running in long rubber boots and carrying a gun and collecting boxes. After running half a mile I was played out, and began to think matters were getting serious. I did not like the prospect of having to walk seven miles back to Moosejaw, and then I was afraid the horse would get lost and fall into the hands of Indians. I also knew he had to cross some deep valleys in the direction he was going, and I was afraid he might upset the buggy and take fright, or he might wander until he came to the railway track, and a vivid idea of a railway accident resulting, crossed my mind, but I could run no farther, and so had to content myself with walking, and the horse and buggy were now nearly two miles away; he was going westward towards an elevated ridge of the prairie, and Moosejaw lay to the south-west. I knew if he got over the top of that ridge of prairie he would fall into the hands of Indians, and I should probably never see him again. The Indians would take care of him after that. I began to despair, and wondered what was the value of the horse and buggy, and what I should say to the owner when I got back to Moosejaw. On reaching the foot of the ridge the horse did not ascend, but turned southward and began to walk along the foot of it. So I gained courage and began to run again: the ridge was a half circle in shape, so I took a short cut across the prairie, in the direction the horse was heading for, and in twenty minutes I nearly got up to him, when he saw me coming, and the rascal set off running again. Some distance away was an old, empty barn, and the horse ran to this place and then came to a halt. I ran along, keeping the barn between the horse and myself so that he could not see me coming, and in getting up to the barn, I ran out from behind and seized him by the rein. Looking into the buggy, I saw my birds had gone, they had got shaken out, many of the eggs I found broken, and some missing altogether. You can judge how disappointed I was. I got into the buggy and drove back two miles in the hopes of finding the birds laid on the prairie, but I did not find a single specimen, so I returned to Moosejaw and consoled myself with the thoughts that matters might have

been worse. I passed a camp of Indians on my way to Moosejaw. Soon the housetops in Moosejaw began to appear and I drove down into the valley, and delivered the horse to its owner, who complained about the splashboard being bent, but I did not tell him of my adventure. After enjoying a wash and a good supper, I visited the ponds near Moosejaw, and flushed a Wilson's phalarope from its nest and three eggs. These I left until the following morning. I rambled around the ponds until it was nearly dark, and then returned to the station house, tired with my day's work.



CHAPTER VIII.

JUNE 9th.—This morning I was out before breakfast and visited the nest of Wilson's phalarope I had found the night previous, which now contained four eggs. It was a handsome clutch; the markings were so heavy that they almost concealed the ground colour. I examined the nest of rusty grackle found some days previously, but it was still empty; also took several sets of red-winged starling and then hastened back to Moosejaw, as I was going to leave this place for Rush Lake. After breakfast, at 7:30 a.m., the train from Winnipeg was seen approaching, and a few minutes later I was on my way to Rush Lake. On leaving Moosejaw we commence the ascent of another prairie steppe, called the Missouri Coteau. We have now reached the end of the continuous settlements, and from here to the Rocky mountains we shall only find the pioneer farmers in groups, here and there, of three or four houses. As we ascend the Missouri Coteau the country becomes very hilly, and is studded with numerous lakes and ponds. We shall see no trees for over one hundred miles, not even a bush, and without them the short buffalo grass gives the country a barren, desolate look; but the land is not barren, as the occasional station gardens testify, with their wonderful growth of cereals and vegetables.

There is a flutter of excitement among the passengers and a rush to the windows—Antelopes! We shall see them frequently now, as we are going through the cream of the antelope country. The beautiful antelope bounds away over the hilly prairie on the approach of the train, and we watch the white tuft which serves him for a tail until it disappears in the distance. The country is reticulated with buffalo trails, and pitted with their circular-shaped wallows. Their white bones are plentiful on the prairies, and at Parkbeg, along the

side of the railway track, were two great piles of buffalo skulls and horns; there must have been several hundreds of them, and they were all sizes, from that of the largest bull to those of the smallest calves.

We are now entering a paradise for sportsmen. The lakes become numerous; some are salt, some are alkaline, and others are clear and fresh. Wild geese become very plentiful, so do ducks of many species; and gulls, terns, plovers, sandpipers, and avosets are common. Waterfowl blacken the surface of the lakes, and long, white lines of pelicans disport themselves along the shores, and we hear the notes and cries of many strange birds. At Chaplin we come to one of the old wives' lakes, which are extensive bodies of water having no outlet, and are consequently alkaline. At Morse, we pass another large lake which swarms with gulls, and seventeen miles further Rush Lake appears in sight—this being my destination. We run along the side of the lake for two miles and then the train comes to a standstill at the small platform, and I was the only passenger to alight The train moves off and resumes its course, and will continue to do so for another thousand miles yet until Vancouver is reached. The journey from Montreal to Vancouver by the Canadian Pacific railway takes five days and eighteen hours, and it is surprising how punctual the trains are, considering the long journey from the Atlantic to the Pacific. After the train had moved off, the station master came up to me and enquired, "What has brought you to this city?" I soon informed him, and he expressed himself pleased to have my company for a few days, as he leads a lonely and monotonous life out here; he was the only hand at the station, and was station master, telegraph operator, baggage man and everything else. Behind the station was a single house, where, I was informed. I should be able to secure a room and meals. I soon found out that my newly made friend was a sportsman who had travelled all through the Saskatchewan region and understood the Indian language. He was well acquainted with the district around Rush Lake for miles, and he told me that after dinner he would take me

to several ducks' nests he knew of. As it was twelve o'clock, we went to the house in the rear, when I was introduced to the landlady as a naturalist who had come all the way from Toronto to explore the regions around here. Dinner over, the station master telegraphed to Moosejaw to enquire if any freight trains were expected to pass through Rush Lake, and as none were coming through that afternoon he got permission for a few hours' absence, so, shouldering our guns, we crossed over the railway track and reached the banks of a stream that runs into the lake, we were joined by his faithful setter dog who soon flushed a male shoveller duck: as he rose, my companion took aim and the duck dropped with a thud to the ground. He was a handsome specimen, with his bright, attractive plumage, and I wrapped him up and covered him with grass so that he could not be carried off by hawks; we left him, intending to come back the same way on our return.

We found the creek alive with broods of young ducks: there were shovellers, mallards, scaups, canvas backs, and teals. Streams in Canada are invariably called creeks, and must not be confounded with the English meaning of the word creek. In England a creek signifies a small bay or inlet, but in Canada a creek is a stream. My English readers must also not get confounded over the name "bluff." In England the name "bluff" is always applied to a rocky headland or steep bank overhanging the sea or river: on the prairies, a "bluff" means an isolated cluster of trees, and the word "slough" is the name of a wet, marshy spot, or shallow pond. The creek at Rush Lake is a sluggish stream, three feet deep and about twelve feet wide, and winds its serpentine course from the station for two miles, and then empties itself into the lake. The sides of the creek are fringed with rushes and tall grass, offering good shelter for ducks and other waterfowl. On our way we came to a small boat, and my companion, Macdonald, advised me to cross to the other side of the creek and he would walk along one side while I examined the other, so I stepped into the boat and pushed it across the stream. Then we began to search in earnest and soon found the place alive

with young ducks. The old birds were very noisy and flew around quacking, and the young ones took to the centre of the stream. I found I was rather late for ducks' eggs, and Macdonald informed me that had I been there five weeks earlier I could have collected scores of ducks' eggs had I wished.

Walking through the long grass, I flushed a female shoveller duck and found its beautiful nest of down and ten fresh eggs. The nest consisted of a hollow scooped out of the ground, and inside the hollow was built a compact nest of down: the top of the nest was flush with the surface of the ground. The eggs are a greyish buff and average in size, 2.05x1.45. The shoveller breeds in Dakota. I have a clutch of ten eggs that were taken in Miner County, June 1st, 1890, and another set of eleven eggs that were taken on May 11th, 1890. I found the shoveller to be one of the commonest ducks in the North-West. I took the nest and eggs, and had proceeded only a short distance, when we flushed a canvas-back from its nest of eight eggs. The nest was well concealed in a cluster of rushes, and also consisted of a depression in the ground, lined with feather and down. The eggs are rather large, averaging, 2.40x1.70, and are a pale greenish buff color. Macdonald soon afterwards shot the male canvas-back, he also shot a coot and a lesser scaup duck. A large black bird came flying towards us, and it turned out to be a turkey vulture: they were common in this district, and I saw them every day while I stayed at Rush Lake. They were very tame and are never molested: they come around the station house and pick up bones or any refuse that is thrown out. I was surprised to find the turkey vulture so far north, as I had always considered it a southern species, but my companion informed me they visited Rush Lake every spring and remain until late in the autumn. The flight of this bird is very graceful, and I was never tired of watching its various aerial evolutions. The setter dog had evidently found something in a cluster of rushes, when suddenly a short-eared owl flew up, bang went the gun, and the owl fell lifeless to the ground. On reaching the rushes, we

found its nest and six white eggs The nest was a small heap of rushes about a foot high, and the eggs rested in a cavity at the top lined with feathers. I found the short-eared owl the most plentiful of the family, and they were found breeding at most of the places I visited between Winnipeg and Rush Lake. I was rather late, however, for their eggs, as they commence to lay about the middle of May. On May 17th one of my collectors took a clutch of five, and another of seven eggs, south of Oak Lake, Manitoba. Another of my collectors took a clutch of eight eggs on May 24th, 1891, and another clutch of five eggs on May 28th, 1891, in South Dakota. All these nests were found on the ground, and were composed of rushes and grass; on the top of the nests were slight depressions, lined with a few feathers and fine grass. I have a series of forty eggs of the short-eared owl, and they can be easily distinguished from those of the long-eared species by their smaller size. They average 1.58x1.20. Dr. Coues in his book, "Birds of the North-West," says, "I am unable to appreciate any constant or tangible differences between the European and the American bird." We had now arrived at the lake, but could not reach the water as it had recently dried up considerably owing to the hot weather, and had left a bed of soft mud some fifty feet in width. On this track of mud numerous avosets, godwits, willets, kildeers, gulls and other birds were feeding. Macdonald pointed out to me a sandy island, from which a clutch of five eggs of the Canada goose had been taken three weeks previously, so I waded out some distance and examined the nest; it was simply a circular hole in the sand lined with feathers and down. I found it a difficult task returning, and was tired out by the time I reached the dry land; the mud accumulated on my rubber boots up to my knees to such an extent that I had some difficulty in raising my feet, and it took some time before I could clean the stuff off.

Rush Lake is about seven miles long and four miles wide. To the west of it are hundreds of acres of marsh land covered with tall rushes, hence its name Rush Lake. We were picking our way through the rushes, when a duck flew up just to one

side of my feet, giving me a sudden start, and there in a hole underneath a clump of rushes I discovered a beautiful nest of twelve eggs of the American widgeon. I could see the eggs were fresh, and, as I was parched with thirst by the broiling sun and we could not reach the water of the lake owing to the belt of mud, I took out an egg drill and, boring a hole in the side, I sucked four eggs and found them very good, and refreshing. This nest of the baldpate consisted of a hollow in the sand one foot in diameter, and this was thickly lined with grass, and feathers and down, on which rested the twelve pale buff-coloured eggs. The American widgeon appears to be a later breeder than most other ducks. I have a clutch of ten eggs that were taken on the 1st of June, 1890, in Miner County, South Dakota, and another clutch of eleven eggs that were collected in Minnesota, June 10th, and another of seven eggs that were taken June 9th, 1890, so this species seems to nest late, even much further south than Manitoba. Dr. Coues, in his "Birds of the North-West," says, "In Northern Dakota I was surprised to find young widgeons still unable to fly, even as late as the middle of September, at a time when all other ducks observed were on the wing." The eggs of the baldpate are like those of the European widgeon, pale creamy buff in colour, but are smaller, averaging 2.10x1.50. As we had now more birds and eggs than we could carry, we hid them from hawks and vultures, and fastened a piece of paper to some tall rushes, so that we could easily find the spot on our return. We then directed our steps to the south shore of the lake, and on our way startled three graceful antelopes, which bounded away at a tremendous speed, and were soon out of sight. On reaching the southern end of Rush Lake we found avosets very numerous and shot three handsome specimens: they were evidently nesting somewhere in the vicinity, but we were unable to find their nests. Three kildeers had nests containing four eggs each, and we also flushed a Wilson's snipe, which flew up calling out "escape," and, suiting the action to the word, dashed away and alighted in the rushes some distance off. We soon found its nest, a slight hollow in the ground lined with bits of drift rushes,

and the four eggs were olive brown spotted with blackish brown, and had a few hair line streaks around the larger end of the eggs. Herring gulls were numerous, and Macdonald shot a fine adult specimen. I expected to find the nest of these gulls, as well as those of the avosets on an elevated strip of stony ground at the south end of the lake, but on arriving there we saw no signs of any nests. Some distance out on the lake were seven white pelicans, and the dog made a rush at them through the water, but they turned on him with open mouths and the ugly creatures scared the dog and he returned whimpering. They rose and flew over our heads, and Macdonald fired at them but missed. They look tremendous birds on the wing and fly heavily, taking big sweeps with their wings. They nest on the east shore of the lake, but as they are early breeders we did not visit this colony. Macdonald informed me that about fifty pairs nest on a stony sandbar at the east end of the lake, and they had fresh eggs the second week in May. The nests are made by the birds scraping together a mound of sand six inches high, and on this they place a few rushes carelessly, and lay generally two eggs, occasionally three, but two is the regular number; the average size is 3.50x2.30. They are chalky white in colour, with a calcareous deposit on them, and are more or less stained.

As it was four o'clock, and Macdonald had to be back at the station to meet the train from the west at 5:30, we turned back and reached the spot where we had left the ducks' eggs and birds. We were heavily laden with all our spoils and our guns began to get heavy, so we tramped along for some distance without saying a word. My companion led the way, and I followed close behind with the dog at my heels. Something tearing its way through the rushes caused Macdonald to come to a dead halt, and he dropped his birds, exclaiming excitedly, "give me a cartridge, here's a wolf." I at once dropped my birds and handed him a couple of cartridges from my belt, and in a second he had placed the cartridge in his gun and was trying to get a sight of the prairie wolf. The dog's bark caused the wolf to bolt out of the rushes, and

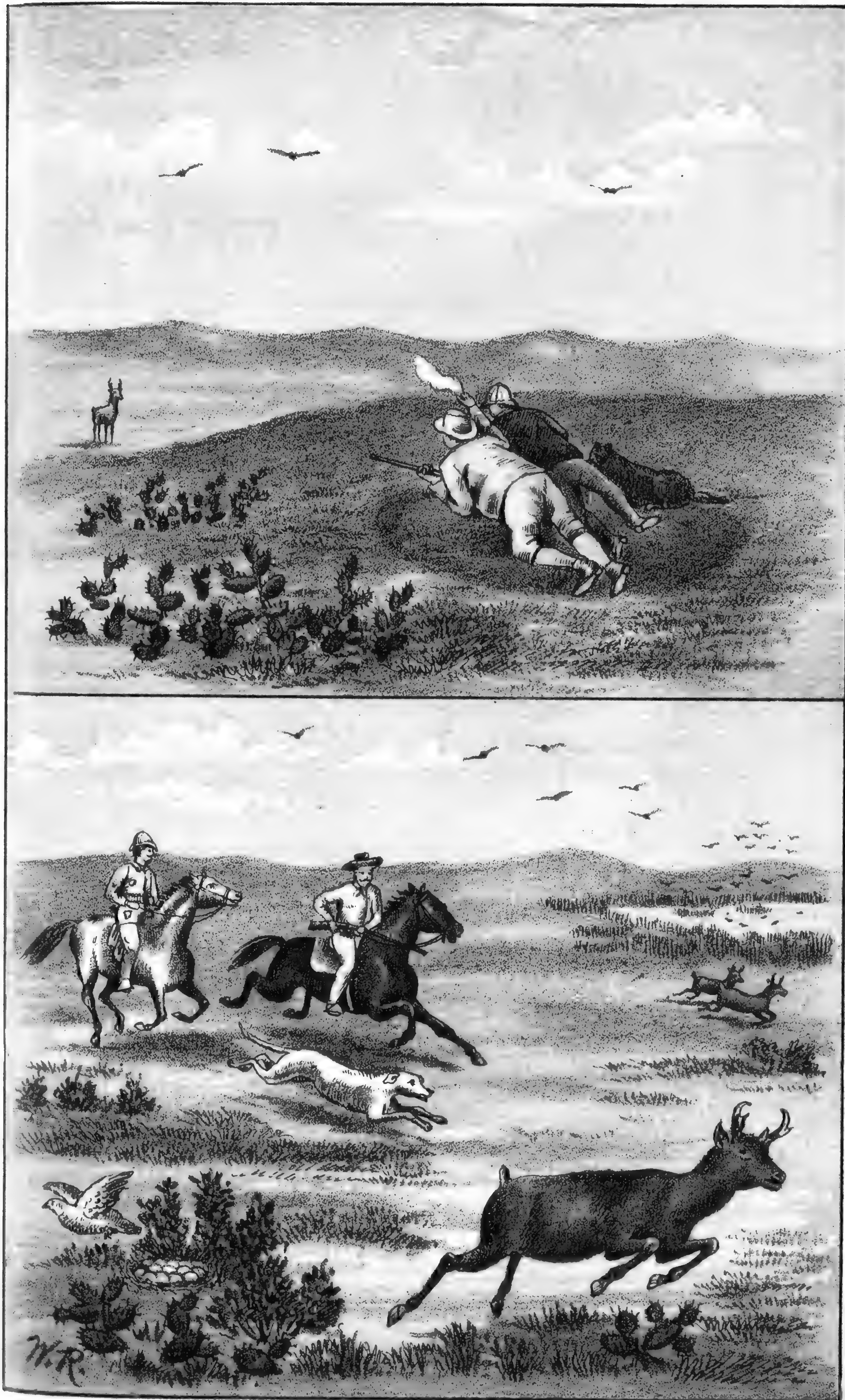
Macdonald, fired but the shots did not seem to take any effect and the animal took to his heels, closely pursued by our dog, and both soon disappeared among the rushes. We had disturbed the wolf while making a meal of a female scaup duck which he had probably seized as she sat on her nest. Soon after the dog returned, having given up the chase. We now arrived at the creek and put up a marsh harrier which skimmed away a few feet above the ground; we sought for its nest without success, so we marked down the spot, intending to return some other time.

It was now five o'clock and the station was yet over two miles away, so Macdonald said he would have to leave me to bring the birds along, whilst he hastened to the station to be in time to meet the train. So I sat down by the side of the creek and blew the ducks' eggs and washed them out. After blowing over forty eggs, I found my burden lightened considerably. I tied the birds together and managed to carry the whole afternoon's spoils along with me. On my return I flushed several ducks and coots from the creek, but did not search for their nests. The smoke of the engine now appeared winding its way through the western hills, and soon reached the station. After the train had left, I saw Macdonald coming to meet me. On getting up to me he enquired, "how many birds I had left behind?" I told him I had got the whole lot, and had blown the eggs which had lessened their weight. He carried my gun, and on reaching the station-house we found supper ready, consisting of beef steak and mushrooms, to which we both did justice. After an hour's rest, Macdonald asked me if I felt like going out again, and as I now felt like a new man, having had a refreshing wash and a good supper, we set out, Macdonald taking his gun with him. We ascended the hills north of the railway, and then turned round and had a splendid panoramic view of Rush Lake and the creek, with the hills in the background. Macdonald pointed out to me a long white streak on the shore of the lake, and told me that was the nesting-place of the pelicans.

The dog, which had followed, came limping towards us. I asked what was the matter, and was informed that he had got a cactus in his foot. On my enquiring if cacti plants grew around here, I was informed that they grew abundantly on these hills, and there were three or four species. We found the dog had got some spines in the soles of his feet, which were easily extracted. Soon afterwards Macdonald pointed out to me patches of cacti. I saw two species which are great favorites in the windows of houses in Toronto. One has a large crimson flower and grows about a foot high; another species has a large yellow flower. They grow in various shapes and all are covered with prickly spines. Macdonald took me to a pond among the hills and showed me a nest and eight eggs of the pintail duck. The nest was in a bank side close to the water, and was a hollow in the ground lined with down. The eggs are pale grayish green, and average 2.20x 1.50. A kildeer plover came flying towards us, and before long we had a number of them flying above our heads. Macdonald shot one, and although there must have been a number of nests around, we did not find a single one, although we searched carefully. The kildeer is a very wary bird, and I never yet flushed one off its nest. Buffalo wallows are numerous among these hills. They are large circular hollows in the ground, from six to nine feet in diameter, and about a foot deep. They are overgrown with short green grass. They were made by the buffaloes in the following manner: The animals, on reaching some damp spot among the hills, would lay down and begin working their bodies round, scraping the ground with their feet. They soon work a large circular hollow into which the water oozes, here they bathed themselves, and coated their bodies with mud, and a buffalo in this state certainly would appear an ugly, shaggy monster. After one buffalo had satisfied himself in wallowing, another would take his place, and in this way these wallows are found all over the prairies. There are generally numbers of these wallows together, showing that a herd of buffalo once frequented these places. The prairies are also bisected all over with their trails.

These trails are from two to three feet wide, and were caused by the buffaloes running over the prairie, one behind the other in Indian file. The weight of two or three hundred buffaloes running one behind the other soon wore a deep pathway on the prairies. Their skulls and horns are scattered all over the prairies, and those in a good state of preservation are collected by the Indians, who polish them carefully and sell them at 75 cts. a pair. In Winnipeg buffalo horns sell for $2 a pair, and in Toronto they are $4 a pair. As the buffalo is now almost extinct, in a wild state, their horns will soon become very valuable.

An antelope appeared on a hill-top before us, so we crouched down in a buffalo wallow, and, making the dog lie down, Macdonald said he would bring that antelope close up to us, so he told me to keep myself and the dog out of sight. He then took out his handkerchief and began to wave it in the air, keeping his body down in the buffalo wallow. The antelope saw it and began to advance a few paces, and then stood staring at the moving handkerchief. Macdonald kept on waving, and the antelope walked a few paces closer, still staring at the handkerchief, and in this way it gradually advanced until it was within thirty yards, when the setter caught sight of him and sprang out after the antelope, which bounded away as swift as an arrow over the hills out of sight. He told me that this is the way the Indians obtain antelope for food: they put a stick in the ground and tie a piece of rag to it, and then lie down. The antelope approaches the object out of curiosity, and is then shot down at close range by the concealed Indian. As it was beginning to get dark, we turned round and descended the hills homeward. On arriving at the station-house I found eight railway hands playing cards; they represented different nationalities, all living under one roof. There was a Russian, a Swede, a Scotchman, a Yankee, a Frenchman, two Canadians, and a London cockney, quite an assortment. Every twenty miles eight men are appointed by the Canadian Pacific Railway Company to look after the tracks and keep them in repair, and these section-houses are built for their accommoda



ANTELOPE HUNTING.

tion. On seeing my birds, the youngest of the Canadians informed me "that he knew where there was a lot of those golden plover nests," pointing to the avoset, so I made arrangements for him to take me to the place the following day. He told me there was a lake five miles north, and three Sundays ago they had been out there collecting Canada geese eggs, and he saw five or six nests of plover. He described the eggs, and I knew they must have been avosets, so it was agreed that we should visit this lake next morning.



CHAPTER IX.



EXT morning (June 10th), while at breakfast, an Indian walked into the house and offered the land-lady the hind-quarter of an antelope for fifty cents. She asked me if I would like some, and on my approval she bought it. I found it to be excellent meat, and almost lived on it for the next three days. Some Indians had arrived the night previous, and had erected their tepees near the section house, opposite my bed-room window. We were ready to start, so my new guide John took my gun and we ascended the hills north of Rush Lake. It was a lovely morning, and the sun glittered on the lake below us. The prairie was covered with sweet-scented flowers, their names unknown to me. There is a rich purple flower that grows in patches many yards square; they are found in the hollows between the hills, and when seen from an elevation they look like ponds of purple ink. There is another flower, bright yellow in colour; I call them wild calceolarias. They also grow in great patches. McCown's longspurs were very numerous, and we found several nests by flushing the birds from before our feet. They flutter along the ground for a few yards, and then, threading their way through the short grass for some distance, take wing. Their nests are made of fine grasses, and lined with a few horse hairs; they are built flush with the ground, and the brim of the nest is thick, but the bottom is shallow. The nests are usually built at the side of a tuft of grass. I was successful in obtaining a fine series of the eggs of this species during my stay at Rush Lake, and also found several nests at Moosejaw. The eggs can be distin-guished from those of the chestnut-collared longspur by their larger size, and the ground colour is usually darker, and the markings heavier. Some clutches, however, so closely resemble those of the chestnut-collared longspur as to be scarcely dis-

tinguishable, but are generally a trifle larger. The average size of fifty specimens is 80x60, and the number of eggs to a clutch is usually five, sometimes only four. In my collection I have seven clutches of five eggs, and four clutches of four. The ground colour varies from white to greyish white, pinky white, clay and greyish olive, usually boldly spotted with umber and blackish brown: many of the eggs are clouded over with dark purple grey which almost conceals the ground colour, and many of the eggs have scratches and hair-line streaks of brown. The male bird has a pleasant song, and sings as it descends to the ground with outstretched motionless wings. It has a black crescent-shaped patch on its breast like that of the meadow lark, and when flying can be easily identified by its white tail feathers. The natives call them ground larks. They were the commonest of small birds found on the elevated prairies. I did not see any chestnut-collared longspurs at Rush Lake, but they were common in the Red River valley towards Winnipeg, where McCown's longspurs are also found in smaller numbers. I was informed that great flocks of snow and Lapland buntings come around the house at Rush Lake in winter, and are surprisingly tame, but they are never seen in summer; they go north to the Mackenzie River, Great Slave Lake, and Alaska to breed. I have a number of nests and eggs of the snow bunting that were collected in Iceland, where the birds are common. The nests are strong, compact and neatly built, and are made of grass, fine roots and hair, and are thickly lined with feathers; the walls of the nest are an inch thick, and the cavity of the nest is deep. They are built on the ground under tussocks of grass, and sometimes under loose stones and in crevices of rocks. The eggs vary exceedingly both in size and colour. I have a series of fifty specimens from Iceland and Greenland. The ground colour is usually white, greenish white or purplish white, and the eggs are speckled, spotted and blotched with various shades of brown and purple grey. The number of eggs laid is from four to six, but usually five. During the past five seasons my Iceland collector has sent me some three hundred and fifty eggs

of the snow bunting. Out of this number were forty-one clutches of five eggs each, nineteen clutches of four eggs, and eleven clutches of six eggs, so that five eggs appear to be the regular number. The eggs are laid both in Iceland and Greenland towards the latter part of June. The average size is 0.90x0.65. The Lapland bunting does not breed in Iceland, but is common in Greenland and Lapland. I have four clutches collected June 20, 1882, in South Greenland, as well as a number of sets of four and five eggs that were collected at Tornea, Lapland, June 11, 1888. The eggs are very dark like those of the titlark, with a chocolate, sienna or olive ground, clouded with darker brown; and some eggs have streaks and hair-lines of dark brown, chiefly round the butt end.

On the high prairie above Rush Lake, curlews, willets, kildeers and Bartram's sandpipers were numerous. We saw a number of marbled godwits, and shot a willet and a marbled godwit. The lake where the avosets breed now appeared in sight, and we were soon walking along its western shore, where we disturbed several Canada geese. John showed me three nests from which he had taken eggs the first week in May. The nests were hollows in the sand along the margin of the lake amongst the grass, and these hollows were lined abundantly with greyish down and feathers. On the lake were several species of ducks and other water-fowl. Avosets were plentiful, and we shot four handsome specimens. This lake was about a mile and a half long and half a mile wide. Near the north end are two small sandy islands, about which were several terns, Bonaparte's gulls, and a few Franklin's gulls. At the east side of the lake a stony sand-bar ran out towards the centre of the lake, and on approaching this place the avosets became very noisy, flying around making a jelping kind of a noise. We soon found two or three nests, and on reaching the end of the sand-bar the nests became so numerous that we had to be careful not to step upon the eggs. It was a grand sight, and one I shall never forget. There must have been over one hundred eggs on this narrow sand-bar. We collected a number of



AVOCET & NEST.

clutches that were fresh or slightly incubated, and left those that had been sat upon some days. The avosets seemed to prefer to make their nests amongst the stones; the buff and white stone being similar in colour to the plumage of the birds, helped to conceal them as they sat on their nests. The number of eggs in each nest was invariably four, and the nests consisted of a hollow scraped into the sand, and lined with a few blades of dry grass. The eggs vary in size, and are not unlike those of the European lapwing, and upon showing them to a Scotchman at Rush Lake, he exclaimed: "Why these are pewitt's eggs, I used to collect lots in Scotland." But they are larger than lapwing's eggs, and are easily distinguished by the oologist. The ground colour is drab, buff, or olive-buff, thickly spotted and blotched with dark brown and black. Some clutches have a greenish olive ground, and one clutch we found had a pale creamy buff ground. Some also have scratches and lines as well as spots and blotches: they average 1.95x1.35. Of one hundred specimens now before me, two of the largest measure 2.20x1x35 and 2.15x1.57, and two of the smallest measure 1.82x1.25 and 1.87x1.30. The avosets seem to prefer the alkaline lakes to those of fresh water; they are beautiful birds, with their long blue legs, and long upturned bills, which look like a piece of curved whalebone. The avocet has webbed feet, and is a good swimmer, and looks very singular when flying, with its long neck and bill stretched straight out in front, and its long legs counterbalancing by being carried straight out behind. We collected a number of their eggs and sucked some of the fresh ones, as the water was alkaline and we were thirsty, as the day was very hot, being one hundred degrees in the shade.

We were walking around the lake towards the north end, when we flushed a scaup duck from its nest, and nine eggs, which proved to be considerably incubated, although we managed to blow them. The nest was similar to most other ducks, consisting of a hole scraped in the ground and lined with down, and was found amongst the coarse grass growing a few yards from the waters' edge. The eggs are easily dis-

tinguished from those of other ducks; they are olive grey, with a buffy tinge, and measure 2.30x1.60.

Near the top end of the lake we came across a perfect skeleton of a large buffalo; at the base of the horns was some hair, and it had evidently only been there a few years, judging from its perfect condition. We tried to shoot some very small sandpipers at the north end of the lake. They ran amongst the grass like mice, and at last John shot one which proved to be a northern phalarope, and soon afterwards we flushed another from its nest, and four eggs. We were surprised to find the rednecked phalarope breeding in this region. The nest was a circular hollow in the sand, three inches in diameter, and was lined with a few blades of grass, and the eggs—four in number—were the smallest sandpipers we had ever found. They have a ground colour of olive brown, and are heavily spotted with blackish brown. They were fresh. We saw several of these small phalarope swimming out in the water with Wilson's phalaropes. We had now arrived at a stony strip of land that swarmed with avosets, but we could not find a single nest. A short distance out were two small sandy islands, and as several terns and gulls were hovering around screaming, we decided to take off our boots and stockings and wade out to examine these islands. In sitting down I almost sat on a nest of Wilson's phalarope containing one egg. We waded out to the first island, and there a sight met our eyes which made our hearts throb with joy. There on the ground were scores of nests of avosets, Foster's terns, as well as a few of those of the Bonaparte's gull. In walking about we had to be careful at every step for fear of treading on the eggs. The avosets flew around jelping, and the gulls and terns flying over our heads screaming—all these species combined made a deafening noise.

The nests of the avosets were simply hollows in the sand, lined with a few blades of grass, and usually contained four eggs, many of which were partly incubated; some nests only contained two or three eggs, and these were quite fresh. One nest contained five eggs, which is an unusual occurence. The

terns' nests were also depressions in the sand, lined with a few blades of grass, and contained two and three eggs each, and many nests only contained one egg, the full complement of eggs not being yet laid as the terns are late breeders. The gulls' nests were also hollows in the sand, lined with grasses, and contained two and three eggs each. The ground colour of some specimens is pale brown, others greenish olive brown, spotted with dark brown of various shades, with grey under shell markings. The average size is 2.00x1.35.

At Crescent Lake, in Manitoba, the Bonaparte's gulls make their nests in bushes growing in or near the water, and the nests are substantial structures of twigs and rushes, but at Rush Lake where there are no bushes, the gulls have to be content to make their nests on the ground. We collected a fine series of avosets' eggs, taking care to keep the clutches separate by marking them with a pencil. The first clutch we marked a-4, second clutch b-4, and so on, until we had got pretty nearly through the alphabet. Any clutches that were advanced in incubation we left for the birds to hatch. We also took a nice series of eggs of Foster's tern, and a number of sets of Bonaparte's gulls, and shot three specimens of the latter. We left the birds and eggs and waded out to the far island, and here we also found a number of all three species, but the avosets were the most plentiful, and these two islands must have had close upon four hundred eggs of the avoset on them. At the far end of the sandy island we flushed a Canada goose, which flew along the top of the water with a splash and making a croaking noise. On arriving at the spot we were delighted to find its cosy nest of down, containing five eggs, which were partly incubated, but we were able to make good specimens of them. This was, no doubt, the second clutch of eggs laid by this bird, as the Canada goose is an early breeder, and has eggs soon after the ice melts on the lakes early in May. The nest was a hollow in the sand, one foot and a-half in diameter, and was abundantly lined with grey down. I now have the nest and eggs in one of my cabinets, and it looks well, surrounded with the downy nests and clutches of Ameri-

can widgeon, shoveller, harlequin, long-tail, eider and other ducks.

Early in May my companion collected two clutches of Canada geese at this lake. They were taken to the station house at Rush Lake and put under a turkey, which was sitting on the eggs during my stay. At the house was a brood of five young Canada geese about two weeks old. The eggs had been collected at this lake the latter end of April, and put under a hen to hatch, and the hen paid them as much attention as if they had been her own offspring. Every spring a number of eggs of the Canada geese are collected and hatched out by turkeys or hens in this way, and when the geese are full grown, they are killed and eaten.

This is the only species of goose that remains to breed in this region; but in the autumn large flocks of snow geese, called waveys by the natives, and white-fronted and Hutchins' geese visit Rush Lake, as well as numbers of trumpeter and whistling swans.

We collected a number of sets of terns, gulls and avosets on this island, and then waded back to the island nearest the shore where we had left the other birds' eggs. We filled our hats, boxes and handkerchiefs with eggs and carried them to shore. As we had more eggs than we could carry, we decided to leave most of them until the following day, when we intended to return with a large basket. So we scraped a large hole in the sand and laid the eggs in it, and covered them with grass and sand, only taking along with us as many clutches as we could conveniently carry. On the return journey, we disturbed a willet off its nest and eggs, and also flushed a McCown's longspur from its nest and five eggs. The nest of the latter was made of dried grass, and lined with a few hairs and built flush with the ground under the shelter of a tuft of grass. The eggs are pale greyish white, spotted with dark purple brown, and also mottled with purplish grey.

After two hours' tramp over the prairie, we reached Rush Lake tired and hungry. After supper, the manager of the farm situated west of Rush Lake, called at the station house, and I was introduced to him, and he promised to drive me next day to a lake ten miles north, near the South Saskatchewan river.

CANADA GOOSE & NEST



CURLEW. & NEST.

CHAPTER X.

JUNE 11th.—Soon after breakfast this morning, the manager of the farm drove up to the house with his buckboard and team of horses, accompanied by three deerhounds, two setters and a water spaniel. Taking sufficient victuals to last us for the day, three of us started out with light hearts. The dogs, however, made it a difficult task to find any eggs, as they ran along some distance in front of us, and disturbed the field plovers, curlews and godwits off their nests. On our way we stopped at a small slough where a pair of marbled godwits evidently had a nest, and after some trouble we succeeded in finding it. The nest was built in the centre of a tussock of grass and contained four eggs, olive drab in colour, spotted with umber brown, averaging 2.25x1.60. After a twelve miles enjoyable drive over the hilly prairie, the lake appeared in sight and we were soon driving along its southern shore. John and myself alighted and began to scour the beach, while the manager walked his horses slowly around the lake to find a suitable camping ground. This lake was about four miles long by two broad and swarmed with Canada geese, American widgeons, shovellers, scaups, gadwalls, pintails, mallards and other ducks, while feeding along its sandy beach were numerous avosets, curlews, godwits, kildeers, sandpipers and herring, Franklin's and Bonaparte's gulls. Many of the ducks and geese had young ones swimming around them, and had I visited this lake six weeks earlier, I should no doubt have found a number of nests and eggs of ducks and geese. This lake lies sheltered between the hills, just south of the Saskatchewan river, and is seldom visited by human beings, consequently the water-fowl are very tame and were swimming about just a short distance from the shore. Our first find was a nest of the pallid-horned lark and two cowbird's eggs. The nest was made of

dry grass embedded in the sand, and the top of the nest was flush with the surrounding sand, and sheltered by a tuft of grass. It only contained one egg of the pallid-horned lark besides the two cowbirds, and all of the eggs were advanced in incubation. The two cowbird's eggs were evidently laid by the same bird. The egg of the pallid-horned lark is deep buff, sprinkled with olive-brown and measures 92x65. The following day I found another nest of this species, it contained two eggs which were fresh, they are very much like the one found previously, both as regards colour and size. The pallid-horned lark inhabits this region and becomes more plentiful northward through Alberta and the Saskatchewan to Alaska, but does not breed in the United States except in Northern Montana. The eggs are larger than those of the prairie-horned lark, of which I have a large series, collected near Winnipeg and Northern Dakota, Minnesota and Iowa. The eggs of the pallid-horned lark are the same size as those of the horned lark which breeds in Northern Europe, of which I have several sets collected in Lapland.

A few pairs of the true horned lark, *Otocoris alpestris*, remain to nest every spring on the island opposite Toronto, Lake Ontario, although the main body go farther north-east to breed around the Gulf of St. Lawrence, Labrador, and Newfoundland. For some time our local ornithologists have been undecided as to whether these shore larks, nesting on Toronto Island, were prairie-horned larks or the true *Otocoris alpestris*. We have now come to the conclusion that they are *Otocoris alpestris*. Early in spring, while this sandy island is covered with snow, and almost before the ice in the bay has broken up, large flocks of larks arrive and frequent the island for some time. By the first week in May the main flocks have left, only leaving a few straggling pairs, which remain to nest.

Two sets, with the nests, before me, are considerably larger than the eggs of the prairie-horned lark. The first set, collected on Toronto Island, May 21st, 1886, consisted of four eggs, averaging in size 90x64. The eggs have a greenish-grey ground, freckled all over with pale brownish grey. Another nest before

me is composed of dead, dried grass, lined with feathers; the top of the nest was flush with the surrounding sand. In this set, collected June 14th, 1889, the four eggs are almost as large as those of the European skylark, averaging 93x65. They have a grey ground, mottled all over with olive-brown and lilac. They resemble in size the eggs of the shore lark from Lapland, and when compared with several sets of the prairie-horned lark from Iowa and Minnesota, it is at once seen that they are considerably larger. As there are a number of geographical varieties of the shore lark; there has always been an uncertainty in their identification and breeding ranges.

We carefully packed the eggs of the pallid-horned lark and the two cowbirds, and walked along the beach of the lake towards a place where avosets were very numerous, but we were unable to find a single nest. We shot a pair of avosets, and later on, a small sandpiper, unknown to me, but which turned out to be the least sandpiper, *tringa minutilla.* As we afterwards saw several others around the lake, we concluded they were breeding, but unless these small sandpipers are flushed off their nests, the eggs are difficult to find. A set of four eggs, collected in Labrador, June 20th, 1887, are buffy drab, spotted with brown and purple grey, they average in size 1.12x82. This bird is also known as the American stint. John shot a curlew and two avosets, and the report of his gun caused a shoveller to fly from a patch of marsh grass to the lake. After some time we found its nest of down and nine greyish buff-coloured eggs. They were slightly incubated.

Our companion, with his team of horses, had found a suitable resting-place, so he took out the horses and gave them a drink; and when we arrived, we decided it was lunch-time, as our long drive over the prairie had made our appetites keen. So we satisfied our hunger with antelope sandwiches, fruit pies and milk. As it began to rain, we took shelter under the buckboard, but the shower was soon over, so John and I set out to explore the lake, while our companion, the farm manager, said he felt like having a sleep, so we left him, as we were too much interested in the surroundings to think of napping.

Behind us was a small pond, surrounded with rushes, it was separated from the lake by a ridge of sand, and this ridge appeared to be a place where the ducks, geese and gulls came to plume their feathers, as the sand was covered with feathers and droppings of birds, reminding one of a barn yard.

On a sand bar were a number of herring and Bonaparte's gulls, so we directed our steps there and found a number of nests of both species. The nests were simply hollows in the sand, lined with grass, and usually contained three eggs, some nests only contained two eggs. The herring gull's eggs vary in ground-colour and markings. Some have a deep yellowish buff ground, others are pale greenish brown. They are heavily spotted with brown of various shades, and have shell markings of purplish grey, and average 2.85x2.00.

The eggs of Bonaparte's gulls are similar to those of Franklin's gull, but are somewhat smaller, and not usually so dark in colour. They vary, both in ground colour and markings. Some are yellowish buff, others greenish or olive, others pale brown, spotted with dark brown and dark grey, average 2.00x 1.35. We collected as many clutches as we could conveniently carry, and blew them on the spot, to prevent them getting broken by knocking against each other. We shot a fine adult Bonaparte's gull, and then proceeded round the north end of the lake. Here the banks of the lake were from twenty to thirty feet high, and were overgrown with bushes. The banks were honey-combed with gopher holes, and a few larger holes were no doubt the homes of the badger. Rose bushes were in full bloom, sending forth a sweet fragrance, and cacti plants were growing plentifully on these banks. We were scrambling up these slopes, when we flushed a small duck out of a gopher hole. It flew into the lake and was soon joined by another small duck. With the aid of our field glass, we saw they were a pair of buffle-headed ducks, so we scrambled up to the top of the bank to try and find its nest. There were several holes, or rather burrows, in the bank, and we could not tell which one the bird flew from. I wanted John to put his hand into the burrows to see if he could find the nest, but he replied,

"What if a rattle snake should get hold of me?" Well, I had to confess myself that I did not fancy putting my arm into the dark burrow, not knowing what the occupant might be, and we stood in silence, wondering what course to take. The duck had flown from this bank, and although the buffle-headed duck is supposed to nest in hollow trees, still I supposed where there are no trees, the buffle-head, like other birds, has to accommodate itself to the country. We got down on our knees and looked into several burrows. In one I thought I saw something, and when my eyes got used to the darkness of the burrow, I saw it was a nest of down, so I put my arm in, but could not reach the nest, so we enlarged the opening, and then succeeded in reaching the nest. It contained twelve eggs, which were partly incubated, but we succeeded in blowing them, and making good specimens of the set. The eggs were laid on a bed of down, three feet from the entrance of the burrow. The eggs are now on a table before me. Two of the largest measure 1.98x1.41 and 1.97x1.40; two of the smallest measure 1.95x1.57 and 1.87x1.40. I expected the eggs would be similar in colour to those of the common or Barrow's golden-eye ducks, ashy green, but they are entirely different. They mostly resemble some varieties of the European teal in colour, but of course are larger. They are a warm dull buff colour, with a greyish tinge. Another clutch of ten eggs, taken from a hole in a decayed tree at Oak Lake, Manitoba, on May 25th, 1890, are greyish buff, and average 2.00x1.45. This nest was found by the bird flying from the hole, which was situated about fifteen feet from the ground, in a decayed limb. The hole was lined with feathers and down.

The buffle-headed duck is not a rare bird in Manitoba and Assiniboia, and the male birds, with their puffy heads, are frequently seen swimming about the lakes and sloughs. In some parts of Manitoba, where the lakes are surrounded with pine, tamarac, and scrub oaks, both the buffle-head, wood duck, and hooded merganser are regular summer visitors, and are known to return year after year to the same tree to lay their eggs.

The wood duck breeds at Whitewater Lake, at the foot of Turtle Mountain, in Southern Manitoba. A clutch of ten eggs taken from a hole in a tree fifteen feet from the ground, on June 1st, 1890, are like eggs of the American widgeon, both in size and colour, being pale buff, and averaging in size 2.00x1.50. The wood or summer duck is a handsome bird, and is well named bridal duck, on account of the beautiful colours and lustre of its plumage.

The hooded merganser is another species of duck that lays its eggs in holes in trees. A clutch of nine eggs in my collection were taken at Pelican Lake, Manitoba, May 28th, 1889. The nest of down and feathers was made inside a decayed tree, ten feet from the ground and some distance from the water. The eggs are a delicate pearly white, and average 2.10x1.70. The male bird can easily he recognized by its striking black and white colours, and also by its crest.

We carefully packed the eggs of the buffle-head, and John tried to shoot the birds, but they were such expert divers, they were soon out of range of his gun. We returned to the place where we had left our companion with his dogs and horses, and, packing up our lunch-baskets and specimens, we hitched the horses to the buckboard and drove round the north end of the lake. Here we flushed a willet off its nest and four eggs, and several Bartram's sandpipers were nesting, but the dogs disturbed the birds before we reached the place where they evidently had their nests. The dogs proved a great trouble, as they ran along in front of us, frightening the birds away, and the only way to find the nests of plovers and other birds, which make their nests on the ground, is to come upon them unexpectedly and flush them off their nests, just a short distance in front; it is then an easy matter to search the spot where the bird flies or runs from. We crossed over the prairie to the lake where we had left the avosets' eggs the day previous, and after a ride of four miles we reached the north end of the lake, where the skeleton of the buffalo lay. Our companion informed us that it was evidently an old buffalo by its teeth, and it had no doubt got left behind by the herd, and had

wandered to the lake to drink, and had probably been attacked by wolves and devoured. It appeared to have only lain there four or five years, as the skeleton was in a good state of preservation. We took out the baskets from the buckboard; these we had brought purposely to take back the eggs we had collected yesterday, and on walking along the beach towards the place where the avosets' and terns' eggs were buried, we flushed a spotted sandpiper off its nest and four eggs, and soon afterwards John shot a buff-breasted sandpiper and a marbled godwit. The buff-breasted sandpiper, no doubt, nests in this district, as it certainly does on the banks of the North Saskatchewan. A set of four eggs in my collection, collected at Prince Albert on June 9th, 1889, may be described as follows: Shape, pointedly pyriform; ground colour, greyish clay, boldly spotted with umber brown, and shell markings of neutral tint. The markings are so heavy at the butt end of the egg as to almost conceal the ground. The nest was a slight depression in the ground, lined with a few blades of grass. The eggs of this species are not unlike some varieties of the European dunlin, but they are smaller, and the ground colour is paler and clay-coloured, whereas the ground colour of the dunlin is greenish, or olive buff. The eggs of the buff-breasted sandpiper average in size 1.45x1.05.

Our next find was a clutch of four Wilson's phalaropes. As usual, the bird stumbled off the nest just in front of my feet. The nest was built in the centre of a tuft of grass, and the four eggs were boldly spotted with blackish brown on a clay ground. John shot a pair of Wilson's phalaropes, and also a northern phalarope; both species were numerous about this place. The shore of the lake was stony, with tufts of grass growing amongst the stones, and this seemed to suit the phalaropes and sandpipers. There were two or three other species of small sandpipers, which I could not identify, as we were not successful in obtaining specimens. I have not the slightest doubt that several species of the rarer sandpipers, supposed to only breed within the Arctic circle, remain to nest amongst these lakes, which are numerous. From here northward

through the Saskatchewan region there are thousands of them, and so little is known of the avifauna of these provinces, that I should not be surprised if some day, when this region is better known to ornithologists, it will be found that such species as grey and northern phalaropes, least sandpiper, American dunlin, semipalmated sandpiper and other northern birds, remain to nest regularly in this region, and further south than is generally supposed. Arriving at the place where we had buried the eggs the day previous, we found they had not been molested; we were afraid foxes might have found them, but they were all right, so we filled our baskets and returned to the buckboard and found our companion and his dogs and horses waiting patiently. As it was four o'clock, we turned the horses' heads homeward. On descending over the brow of a slope, we disturbed a curlew off its nest, which consisted of a saucer-shaped hollow in the ground, lined with grass, and the four eggs were pale olive brown, spotted with dark brown, and measured 2.75x1.80.

Later on, the noise of the horses' feet started a burrowing owl out of its hole, and it flew a short distance and perched on a stone. John put a cartridge in his gun and got off the buckboard and shot it. It was only winged, so I handed it to the farm manager to kill, while John and I tried to get at the nest; we piled up some stones so that we could easily find the place next day, when we intended to return with a shovel to dig down to the nest.

On our way home, the dogs caught scent of a jack rabbit and gave chase, and ten minutes later we came upon Dan, the setter, who was sat down guarding the rabbit which lay dead between his paws, and the other dogs were sat around him, waiting patiently, but not daring to touch it, as Dan was boss over the other dogs. Their master got down from the buckboard, and taking up the rabbit, he threw it amongst the six dogs, and in less than one minute the rabbit was torn into pieces, and disappeared down six hungry throats. and we proceeded homeward. Shortly afterwards our companion called out: "Look there!" Glancing in the direction, we saw the hounds in full

cry after another jack rabbit, and a splendid bit of coursing was seen to advantage over a level stretch of prairie. The three deer hounds were close behind the heels of the hare, then followed the two setters some distance behind, while half a mile in the rear was the little water spaniel, running at his full speed. It was amusing to see him so eager in the chase, yet so far behind; he was no match for the nimble hare and the fleet-footed hounds. Two of the hounds were losing ground, but the youngest and most sleek kept close at the heels of the hare, and we expected every moment to see the hound seize the hind legs of the hare, who was fleeing for his life; every second we expected jack would drop, but he had a knack of turning so suddenly that it thwarted the hound on several occasions. This exciting scene terminated by the hare and hound disappearing behind a slope near the railway. We afterwards heard that poor bunny succumbed, as the railway hands saw the dog devouring a rabbit alongside of the railway track on their way home from work. I went home and had supper with the farm-manager, who showed me over the farm and ranches. While at supper, a cowboy came in and reported that some Cree Indians had stolen a mare, and had gone west towards Swift Current. He was ordered to be up and after them at day-break, and to take a brace of revolvers and his swift horse. Next evening he returned home safe with the mare, having overtaken the Indians at Goose Lake, nearly forty miles west of Rush Lake. They told him they had found the mare, and after a few threats and curses they gave the mare up to him, and he reached home tired, having ridden on horseback eighty miles that day. This farm and ranch, consisting of 10,000 acres, is owned by the Canadian Agricultural Company. These farms, ten in number, occur at intervals of thirty miles between Rush Lake and Calgary. The country around here is specially valuable as a stock-raising district. It is impossible to conceive of a better stock country than that lying between the Cyprus Hills and the railway. The Cyprus Hills stretch from Goose Lake to Medicine Hat, on the South Saskatchewan River; they gradually rise towards the west,

until they reach an altitude of 3,800 feet, and in many places are covered with valuable timber. The country is rich in grasses that possess peculiar attractions for horses and cattle, and the valleys and groves give ample shelter all seasons of the year, and the numerous streams flowing out of the Cyprus Hills afford an unfailing supply of water. The handsome profits realized by the stockmen testify better than words to the value of this district for cattle-raising. Another splendid ranch country is from Calgary to the foot hills of the Rockies, and southward one hundred and fifty miles to the United States boundary. You may be sure of a cordial welcome, should you visit the ranchmen, and it will be well worth your while to do so, if you should ever travel through this territory. Cattle and horses graze at will all over the country, summer and winter alike. The warm "Chinook" winds from across the mountains keep the ground free from snow, except for two or three days at a time, and the nutritious grasses are always within reach of the cattle. In the spring and autumn all the ranchmen join in a "round up," to collect and sort out the animals, according to the brands of the different owners, and then "the cowboy" appears in all his glory. To see these splendid riders "cutting out" or separating the animals from the common herd, lassoing and throwing them, that they may be branded with the owner's mark, or herding a band of free-born and unbroken horses, is well worth seeing. The ranchmen, fine fellows from the best families in the east, and from Scotland and England, live here in a lordly way, and I envy them their happy, contented lives. Admirable horsemen, with abundant leisure and unlimited opportunities for sport, their intense love for this country is no matter for wonder, nor is it surprising that every week brings more young men of the best class to join in this free and joyous life.



CHAPTER XI.

JUNE 12th.—I was up early this morning and blew a quantity of the eggs collected yesterday. After breakfast we set out for the hills north of Rush Lake, and John carried along with him a spade to enable us to dig for some burrowing owl's eggs. A pair of turkey vultures were seen flying around in circles, with motionless wings, high in the air, and we sat down for some time and gazed upwards at their beautiful aerial evolutions. When the ornithologist sees these red-headed vultures on the wing for the first time, performing all their movements with the utmost grace and elegance, he cannot help exclaiming, "What magnificent birds!" but after he becomes acquainted with their disgusting habits when feeding, he can never look upon them with the same admiration as before. John informed me that turkey vultures were more numerous years ago, when he was a boy, and when the buffalo were plentiful on the prairie, and that after a buffalo had been killed and the best parts cut up and carried off for food, the refuse was left for the wolves and vultures. At first only two or three vultures would appear on the scene, but before many hours had elapsed their numbers would increase to twenty or thirty, here they would fight over the carcass, and eat to such excess and become so crammed that they were unable to fly. They are great cowards when captured, and never attempt to defend themselves as hawks or owls do when winged; the latter lie on their backs and strike out with their talons, and often keep a dog at bay for a considerable time, but the turkey vulture merely hangs down its head in the most abject manner, and if it has been recently eating anything it will disgorge the contents of its stomach at its captor's feet. The turkey vulture is mute, and their only noise is a kind of hiss. It is only when flying these birds

show to advantage; when on the ground they walk or hop, sometimes moving with a succession of leaps, accelerated with the wings. When about to take flight they stoop till their breast almost touches the ground, and then unfolding their wings, give a vigorous spring into the air; with a few powerful, hurried flaps they are fairly off. They soon begin their gyrations with set wings, only beating at intervals when they are forced to rise rapidly away from some obstacle, and, circling thus, they are shortly in the upper air. Though the turkey vulture has a slothful appearance and disgusting habits still it lays beautiful eggs, which somewhat redeems its character in the eyes of the oologist. Next to the osprey, they are the richest in colouring of the North American raptores. A large series make a good display. They are usually creamy or yellowish white, variously blotched and splashed with rich brown, and also have numerous markings of purplish-grey. They measure $2\frac{3}{4}$ inches in length by 2 inches in breadth. The turkey vulture only lays two eggs, generally on the ground, and the nest is a slight affair. The first nest we found was that of the pallid horned lark; the nest was made of dry grass, lined with a few cow hairs, and was embedded in the earth. The bird was flushed off the nest; it only contained two eggs of a deep buff colour, freckled with pale brown. They measure .90x.65 and .92x.66.

We directed our steps to the place where we had shot the burrowing owl the afternoon previous; we followed the track the wheels of the buckboard had made in the short grass, and this led us to the place where we had piled up some loose stones near the mouth of the burrow. There were numerous holes, and John commenced to dig with the spade; the ground was stony and it was no easy matter digging down the burrow. The sun was very powerful, and the mosquitoes were a terror, every sting was like that of a bee, and caused red, inflamed spots to blister all over our necks and faces. We dug in turns, and found the burrow went perpendicularly down about three feet and then ran along parallel with the surface of the ground for another four feet. John

1890



SHORE LARK.



TURKEY VULTURE.

Houseman 1895

was tired out and was bathed in perspiration, so I threw off my coat and vest and commenced to dig, and soon afterwards threw out some manure, so I knew we were near the nest of the burrowing owl, as they always line their nests with dry horse-dung. John then crawled down the hole we had dug and reached the eggs, and I pulled him out by his feet. It just took us one hour to dig down to the eggs. The nest contained seven eggs, partly incubated. Although John had lived on the prairies all his life he had never previously seen the eggs of this bird, but he said he would never forget that day and the difficult task we had in obtaining the set of eggs. Some authors say that the rattlesnakes, prairie dogs and burrowing owls live together in their burrows in perfect harmony, but this is bosh. It is true these species are frequently found in the villages of the prairie dogs. The owls accommodate themselves to the burrows which have been dug by the prairie dogs, as offering the most convenient nesting-places, and the rattlesnakes are there to obtain food, and are known to live extensively on young gophers.

Dr. Coues, in his book, "Birds of the North-West," gives an interesting account, of these three creatures, the rattlesnake, prairie dog and burrowing owl. "First, as to the reptiles, it may be observed that they are like other rattlesnakes, dangerous, venomous creatures; they have no business in the burrows, and are after no good when they do enter. They wriggle into the holes, partly because there is no other place for them to crawl into on the bare, flat plain, and partly in search of birds' eggs, owlets, and puppies to eat. Next, the owls themselves are simply attracted to the villages of prairie-dogs as the most convenient places for shelter and nidification, where they find eligible ready-made burrows, and are spared the trouble of digging for themselves. Community of interest makes them gregarious to an extent unusual among rapacious birds; while the exigencies of life on the plains casts their lot with the rodents. That the owls live at ease in the settlements, and on familiar terms with their four-footed neighbors, is an undoubted fact, but that they inhabit the

same burrows, or have any intimate domestic relations is quite another thing. It is no proof that the quadrupeds and the birds live together, that they are often seen to scuttle at each other's heels into the same hole when alarmed; for in such a case the two simply seek the nearest shelter, independently of each other. The probability is, that young dogs often furnish a meal to the owls, and that in return the latter are often robbed of their eggs by the dogs: while certainly the young of both, and the owls' eggs, too, are eaten by the snakes. In the large villages there are thousands of burrows, many occupied by the dogs but more perhaps vacant. These latter are the homes of the owls. Moreover, the ground below is honey-combed with communicating passages leading in every direction. If the underground plan could be mapped, it would resemble the city of Boston, with its tortuous and devious streets. The dogs are continually busy in fair weather in repairing and extending their establishments. The main entrance may be compared to the stumps of a hollow tree, the interior of which communicates with many hollow branches that moreover intersect these passages, finally ending in little pockets, the real home of the animals. It is quite possible that the respective retreats of a dog and an owl may have but one vestibule, but even this does not imply that they nest together. It is strong evidence in point, that usually there are the fewest owls in the towns most densely populated by the dogs, and conversely, scarcity of food or water often makes the dogs emigrate from one locality to another; it is in such "deserted villages" that the owls are seen in greatest numbers. The note of the burrowing owl is similar to that of the yellow-billed cuckoo. Their favourite food is grasshoppers, and they also live on lizards and young prairie dogs. They are commonly observed perched on one of the innumerable little eminences that mark a dog town. Amid their curious surroundings, they present a spectacle not easily forgotten. Their figure is peculiar, with their long legs and short tail; the element of the grotesque is never wanting; it is hard to say whether they look most ludicrous as they stand stiffly erect and motionless, or when

they suddenly turn tail into the hole, or when engaged in their various antics. The eggs of the burrowing owl are glossy white and nearly round; the usual number is six or seven, although as many as ten are frequently found in one nest; the average size is 1.24x1.03. There were several other burrows in the immediate neighborhood, but we were quite satisfied with one clutch, and we were only too glad to move away from those little pests, the mosquitoes, who were gathering around us in myriads. Below us between a ridge of hills was a small slough, so we went in this direction, and were saluted by a pair of willets, and after some searching came across the nest of four eggs. The eggs of this bird are brownish olive marked with bold spots of various shades of umber brown and shell markings of purplish grey: they are large for the size of the bird, and average 2.12x1.50.

Our next find was a nest of McCown's longspur, containing four eggs, slightly incubated. This is a pretty set, and heavily marked; the white ground colour is almost concealed by purplish grey, and on the top of this clouding are heavy spots of dark brown. A marsh hawk was seen harrying over the prairie, no doubt on the look out for gophers; it was an adult male in blue plumage. From a hill-top we could see a small lake, nearly two miles away, so we turned in this direction, and on arriving there we found the surface dotted all over with wild fowl. There were numbers of Canada geese, shovellers, mallards, godwits, American widgeons, scaups, and other ducks. The water was alkaline, much to our disgust, but we were so parched with thirst, from the effect of the broiling sun, that we were compelled to take a few sips of the water. It acts like medicine, and is as good as a dose of Epsom salts, but if too much is taken it gripes fearfully, and John informed me he once made himself ill through drinking alkaline water. The alkaline can be seen all over these prairies, coming up through the earth like white flour, and little vegetation grows upon these alkaline tracts. The birds, however, don't seem to be affected by it, and avosets and pelicans seem to prefer the alkaline lakes to those of fresh water. There were a number of

avosets along the beach, and we disturbed one from its nest of four eggs, which were on the point of hatching. The shells were chipped, and the young ones chirping inside the shells; the parent bird was greatly troubled, and flew around us jelping, so we retired from the spot so that she could return and help her little ones out of the shells. Soon afterwards a spotted sandpiper was startled off its nest and four eggs, the nest consisting of a depression in the sand, lined with a few blades of grass. I found a number of sets of this species during my stay in this district, and noticed that the ground colour is much paler than those found on Toronto island and the east; perhaps the alkaline district and change of food has something to do with it. I have a large series of eggs of the spotted sandpiper I collected on the island opposite Toronto, Lake Ontario, and when the eggs collected at Rush Lake and vicinity are compared with this series, it is at once noticed that the ground colour of those from the alkaline lakes is almost white, or very pale clay, whereas the ground colour of the eggs collected in the east is deep clay or buff; the difference is very noticeable.

I almost trod upon a young avoset in down; as it crouched between the small stones I caught sight of its' bright little eye or would have stepped on it, the downy plumage corresponded so closely with the stones and sand. On glancing round my feet I saw two others crouched down between the stones, motionless; on picking them up they began to call out lustily, and putting them down again they ran along the sand as fast as their legs could take them. They are pretty little creatures, and I would have liked them as specimens, but I could not deprive the little fellows of their lives, so we moved off and the mother then flew towards them and led them further away to a place of safety. Our next find was a set of four eggs of the semipalmated plover. The nest, as usual in the case of plovers and sandpipers, was simply a hollow in the sand, lined with a few blades of grass, and the eggs are not unlike smaller varieties of the kildeer plover—ashy clay, spotted with blackish brown. This species is more numerous

on the banks of the North Saskatchewan. On walking through some long grass around the lake we flushed a gadwall duck off its nest; it flew into the water amongst the other ducks, many of which were swimming about with their young ones. The nest consisted of a hollow scooped out of the sand, which was snugly lined with down, and contained nine eggs, which are pale buff and very similar to those of the European widgeon. The eggs were partly incubated and average in size 2·10x1·60.

As it was one o'clock, we sat down and had our lunch of antelope sandwiches, but we were so thirsty we had some difficulty in disposing of them, and had to go down to the lake and take a couple of handfuls of alkaline water to wash the sandwiches down. After resting awhile and watching the various movements of the ducks, geese and other waterfowl on the lake, we got up and followed the lake round its northern shore, disturbing numerous marbled godwits, avosets, kildeers, phalaropes, and several species of small sandpipers we could not identify; we had not brought a gun with us, or else we might have secured several rare species of sandpipers. We spent two hours in rambling round the shores of the lake, and, finding no more eggs, we struck out across the prairie in the direction of home. We met a prairie wolf coming towards the lake: he did not turn back, but kept a few hundred yards to the north of us, he kept stopping and looking at us and then ran along a little farther and stopped again, and eyed us once more; we hallooed at him, and he ran off towards the lake: probably he was after a duck for his evening meal.

While tramping across the prairie we startled up a small bird from the grass and were pleased to find a nest of that rare bird, Sprague's pipit. The nest was like that of a shore lark or longspur, and made of dry grass. It was sunk below the surface of the surrounding soil, under shelter of a tussock of grass, and contained five eggs. They are greyish white, freckled all over with purplish grey, averaging in size 0.90x0.62. Another clutch of five eggs in my collection was taken near Crescent Lake, May 31st, 1890. They are greyish-

white, and the purple grey freckles are so thick as to almost conceal the ground colour. This nest also contained an egg of the cowbird. One of my collectors who has visted me this week in Toronto, who lives fifteen miles north of Regina, Assiniboia. informs me that Sprague's pipit, also called Missouri skylark, is plentiful around his farm, and can be heard almost anytime early in June, singing and soaring in the sky. During my trip through the North-West I do not remember having heard this bird; its song is said to be so much like that of the European skylark with which I am so well acquainted that I should not have failed to have noticed it. The eggs of this bird are scarce in collections, but as it is known to breed in Manitoba and Assiniboia, near the homes of some of my collectors, I hope before long to be able to secure a number of clutches of the eggs of this bird. Dr. Coues gives an interesting account of the soaring habits of this species, and they correspond exactly with those of the European skylark, a bird with which I am very familiar, and whose powerful song I have often listened to as I have lain down in some meadow or moorland of heather in the north of England, watching the skylark soaring, and singing all the time, until it becomes a mere speck in the sky, and its song does not cease until it descends to the earth again. Dr. Coues, in writing about the Missouri skylark, speaks of its wonderful soaring action, and its inimitable, matchless song during the breeding season. He says: "It is no wonder Audubon grew enthusiastic in describing it. Rising from its nest, or from its grassy bed, this plain-looking little bird, clad in the simplest colours and making but a speck in the boundless expanse, mounts straight up on tremulous wings till lost to view in the blue ether, and then sends back to earth a song of gladness that seems to come from the sky itself, to cheer the weary, give hope to the disheartened, and turn the most indifferent, for the moment at least, from sordid thoughts. No other bird-music in our land compares with the wonderful strains of this songster; there is something not of earth in the melody coming from above, yet from no visible source.

The notes are simply indescribable, but once heard they can never be forgotten. Their volume and penetration are truly wonderful: they are neither loud nor strong, yet the whole air seems filled with the tender strains, and the delightful melody continues long unbroken. The song is only heard for a brief period in the summer, ceasing when the inspiration of the love season is over, and it is only uttered when the birds are soaring."

It is not a little singular that the Missouri skylark should have so long continued to be rare in collections, since it is very abundant in the extensive region which it inhabits. The first specimen was taken by Audubon at Fort Union, June 19th, 1843, and long remained unique. Some years afterwards another specimen was taken by Captain Blackiston, on the Saskatchewan, and which is now preserved in the Smithsonian Institute at Washington. We carefully packed this set of rare eggs and tramped homewards. The only nest we found on our return journey was that of the western vesper sparrow, with four eggs; they are similar to those of the common vesper sparrow found in the east, but are somewhat smaller; the nest was also similar. We came across two large flocks of cowbirds; there must have been a hundred in each flock. They are known here as buffalo birds, from their habit of following the herds of buffalo. They frequent the ranches, and are always seen amongst the cattle, perching on their backs and feeding on the insects found around cattle; they become very tame and will hardly get out of the way. Like the European cuckoo, they lay their eggs in other birds' nests, and know nothing of the cares of bringing up their young, leaving this for other birds to attend to; and, like the European cuckoo, the cowbird lays a very small egg for the size of the bird, and the habits of both species in regard to nidification are very similar. I have several times found two cowbird's eggs in one nest and the eggs so much resembled each other as to leave no doubt as to their having been laid by the same bird; but they usually only lay one egg in each nest, and probably lay five or six eggs during the season. Dr.

Couse's account of the habits of this bird is very interesting; he says, "It is interesting to observe the female cowbird ready to lay; she becomes disquieted, betrays unwonted excitement, and ceases her busy search for food with her companions. At length she separates from the flock and sallies forth to reconnoitre, anxiously indeed, for her case is urgent and she has no home. How obtrusive is the sad analogy! She flies to some thicket, or hedgerow, or other common resort of birds, where something teaches her—perhaps experience—nests will be found. Stealthily and in perfect silence she flits along, peering furtively, alternately elated or dejected, into the depths of the foliage; she espies a nest, but the owner's head peeps over the brim and she must pass on. Now, however, comes her chance, there is the very nest she wants, and the owner not at home. She disappears for a few minutes, and it is almost another bird that comes out of the bush. Her business done and trouble over, she chuckles her self-congratulations, rustles her plumage to adjust it firmly, and flies back to her associates. They know what has happened, but are discreet enough to say nothing." It does not appear that the cowbird ever attempts to take forcible possession of a nest; she lays her egg while the owners of the nest are away. On their return, the owners of the nest hold anxious consultation in this emergency, as their sorrowful cries and distracted actions plainly indicate. If the nest was empty before, they generally desert it; sometimes even after there is an egg of their own in the nest, they have nerve enough to let it go, and desert the nest, rather than assume the hateful task of incubating the strange one; but if the female has already laid an egg or two the pair generally settle into the reluctant conviction that there is no help for it, they quiet down, and things go on as if nothing had happened. Not always, however, will they desert even an empty nest; for some birds have discovered a way out of the difficulty—it is the most ingenious device imaginable, and the more we think of it the more astonishing it seems. They build a two-story nest, leaving the obnoxious egg in the basement. The summer yellow bird has been known to do this.

Another summer yellow bird was known to build a story to her nest, leaving the cowbird's egg in the cellar, and then, finding another cowbird's egg violating her premises, she forthwith built a second story, and finally laid her own eggs on the top flat, leaving the two cowbird's eggs in the two lower stories to addle. The eggs of the cowbird vary considerably both in size, colour and markings, but are so common and well known as not to need a description here.



CHAPTER XII.

JUNE 13th.—This morning I visited the marshes bordering Rush Lake, and followed the creek for two miles, disturbing numerous broods of young ducks, which were swimming in the creek. If I had visited this creek early in May I should have been able to collect scores of ducks' eggs, as this appeared to be a favourite haunt of the different species of ducks. The following August, after my visit to this place, Macdonald wrote me as follows: "About two weeks after you left, mowers were set to work about the point where the creek ends, and they exposed in the vicinity close upon one hundred nests, all ducks'. The creek was for some weeks a sight to delight the naturalist or sportsman, being literally filled with young ducks of the various species. Once fairly feathered and able to fly, they took wing for the lake, which at present is covered with all manner of ducks, geese, swans, and other water-fowl. The season for geese opened the 15th of August, but ducks and grouse do not come in until September 1st. In the meantime there is a great cleaning up of guns." No doubt Rush Lake is a paradise for sportsmen in the fall, for there are myriads of wild-fowl on the lake, and I am informed that 100 geese and ducks a day is considered only a fair bag for one gun, and any one very enthusiastic might kill three times this number. Snow geese, called waveys by the natives and sportsmen, are exceedingly numerous, so are Canada geese, white-fronted geese, Hutchins', Ross's, and Brant geese, swans, and over a score varieties of ducks, to say nothing of the cormorants, pelicans, gulls, grebes and other birds. Truly Rush Lake must be a wonderful sight in the fall of the year. Along the banks of the creek I started a marsh harrier, and found its nest in a patch of rushes. The nest was made of reeds on the ground and was about four inches thick and one foot in diameter: the cen-



MARSH HAWK AND NEST AND WHITE PELICAN.

tre of the nest was hollow. caused by the weight of the five eggs it contained. The eggs are plain bluish white without markings, and measure about 1.85x1.40. Although I saw marsh harriers every day, and at every place I stopped between Winnipeg and Rush Lake, their nests were hard to find, owing to the birds being so wary, and as they make their nests on the open prairie they can easily see objects approaching and fly up off their nests while the intruder is some distance away. The marsh hawk is abundant in Miner county, Dakota, and last season I received a number of sets from my collector there, amongst them is a set of four eggs which are well spotted with brown all over, this is the only set in which the eggs have markings out of a series of over forty eggs, all the rest are plain bluish or greenish white, but in some cases the eggs are stained more or less. The usual number of eggs found in one nest is five or six, although I have a clutch of seven eggs that were collected in Manitoba, June 15th, 1890. In the North-West the marsh harriers in brown plumage are much more numerous than those in blue plumage. In fact I only saw five or six of the latter, although I must have seen dozens in brown plumage. In some parts of Manitoba it is impossible to walk a mile across the prairie without seeing one or more marsh hawks, and in crossing over the prairie on the railway, these species were frequently seen from the car windows. The bird may be recognized at any reasonable distance by its peculiar configuration, produced by the length of the wings and tail, its easy sailing flight, the singular bluish and white coloration of the adult male, and the conspicuous white patch on the root of the tail of the female and young.

The marsh harrier belongs to the "ignoble" birds of the falconers, but is neither a weakling nor a coward, as any one may easily satisfy himself by handling a winged bird. It lacks the splendid action that insures success in the pursuit of feathered game, to the dashing falcons and true hawks; with all its stroke of wing, it acquires no such resistless impetus. Audubon says that "it sometimes attacks partridges and plovers," but its ordinary food consists of field mice, small reptiles,

and insects. It is particularly fond of frogs. These goggle-eyed creatures suffer more from the harriers than from all the school boys that ever stone them on Saturday afternoon. This bird is called harrier on account of its method of beating, or quartering the ground when in search of prey, putting one in mind of the evolutions of the hound similarly engaged. The clutch of five eggs just collected were blown and then packed in a box, and I then examined the far end of the creek, when I was successful in flushing a pintail duck from its nest of down, containing nine greyish-olive eggs. The nest, as usual, consisted of a hollow in the ground, lined with down from the breasts of the birds, the top of the nest being level with the surrounding soil. The pintail is one of the most elegant and graceful ducks found in the North-West, and can be easily recognized by its long-pointed tail, and its long slender neck. The pintail is abundant in Iceland, from which country I have just received a number of clutches, with beautiful nests of down, together with nests and eggs of harlequin duck, goosander, long tail, Barrow's golden eye, redbreasted merganser, scaup, and other species of the duck family which breed in Iceland, as well as in North America. As it was nearly dinner time, I returned to the station-house, and on my way disturbed a Bartram's sandpiper off her nest and four eggs: this clutch was prettily marked with large umber brown spots, and purple grey splashes on a clear buff ground.

Macdonald informed me he had seen a whooping crane flying towards the lake, and asked if I had seen any around there, which I had not. While at dinner he told me of a nest of the whooping crane he once found on the banks of the North Saskatchewan; he said he remembered that nest well, as he and his brother came near losing their lives on the same day he found the nest. Seven years ago, just before the rebellion broke out amongst the North-West Indians, Mac. and his brother were camping near Battleford, on the North Saskatchewan, and were out on a tramp over the prairie, when they came across a nest of the whooping crane containing two eggs, which they left in the nest intending to call for them on their

return. On reaching the river they walked along its banks for some distance, when they found a canoe, so they decided to cross the river and explore the banks on the other side. Soon afterwards they came across an Indian, who was sat down fishing, and as they knew the Indian language they walked towards him: he started to use threatening language, and said the Indians were going to kill all the white men on this side of the river before many more days had elapsed, so the eldest Macdonald told him he had better commence the killing now, and therewith drew his revolver from his hip pocket. The Indian immediately sprang to his feet and bolted through the bushes, and Mac. fired into the air to frighten him, which caused the Indian to quicken his pace, glancing around as he ran. After he had gone, the two brothers considered what they had better do, and decided to return to the canoe and cross the river again, as rumours of an Indian uprising had been talked of for some days, and they began to think, perhaps, there was some truth in the Cree's threats. On crossing the river they dragged the canoe up on the banks, taking the paddle along with them; they ascended an elevation a mile away, and glancing back in the direction the Indian had gone, they saw not far off an Indian encampment of over a score tepees. So they lay down behind the brow of the hill, concealing themselves in a buffalo wallow. With the aid of their field glass, they plainly saw the Indians were in a state of excitement, running from one tepee to another, and presently over a dozen bucks were seen hastening towards the place where the two brothers had met the Indian fishing. As they came nearer and nearer, their voices and yells could be heard; presently they reached the spot opposite to where the canoe was, where they came to a halt for a few minutes, when one of their number was seen to be stripping himself of his buckskins, and a few seconds afterwards he plunged into the river with a splash, and swam over to where the canoe lay, evidently intending to paddle it back to bring his companions over, but on finding the paddle missing he swam back again, and as the two Macs. thought they had better retire unobserved, they hastened back

to their tent, which was five miles away. That same afternoon they packed up and drove towards Saskatoon, and on arriving there, two days later, they heard that a number of whites had been killed near Battleford, and felt thankful that they had so narrowly escaped a similar fate. Soon afterwards the rebellion broke out amongst the North-West Indians, and after severe fighting for several weeks, the Indians were defeated, and their leaders, Big Bear, Riel, and others, taken prisoners, not before Canada had lost many of her brave young volunteers.

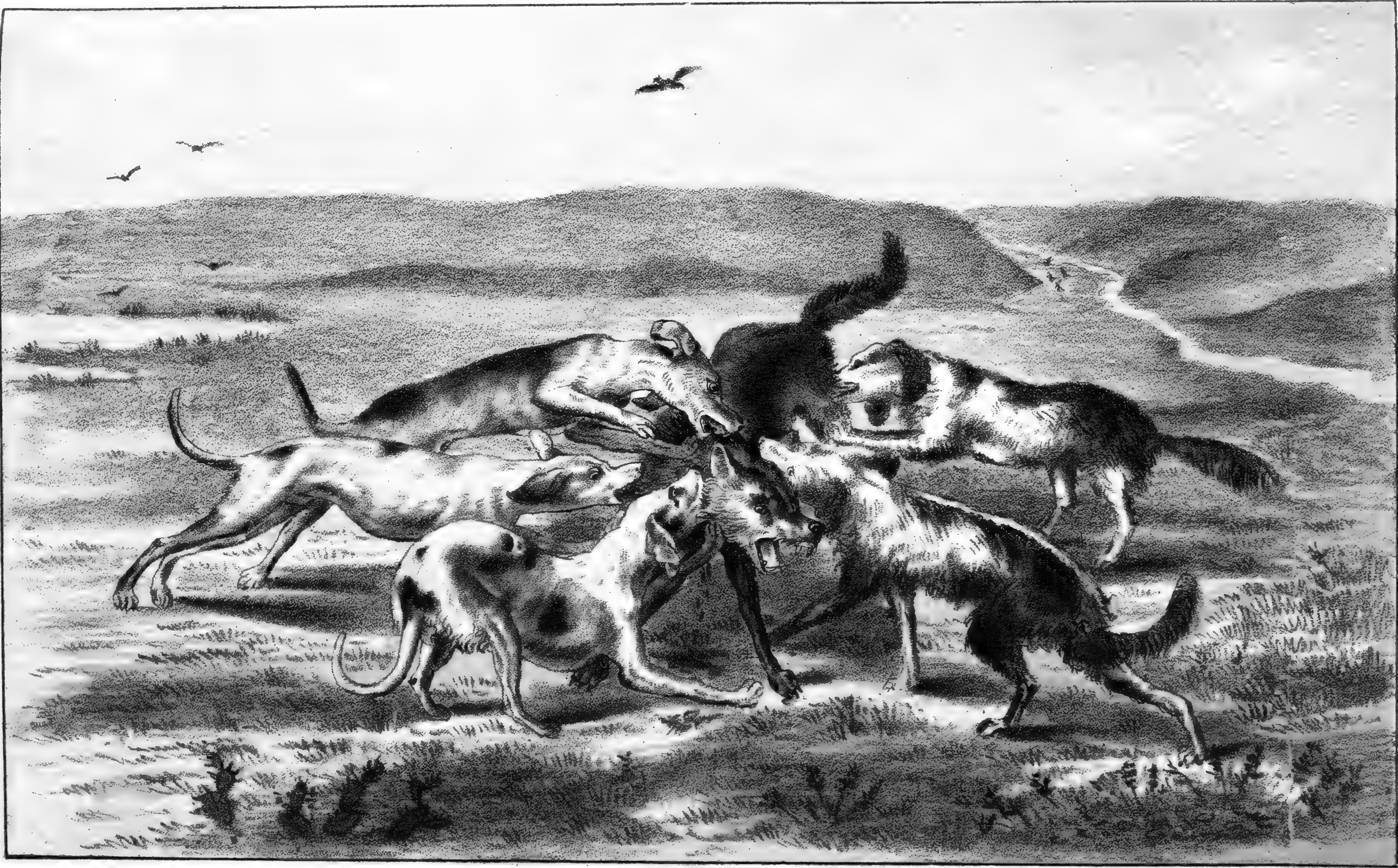
On inquiring what became of the eggs of the whooping crane, Mac. told me that in their excitement they were forgotten, so were probably hatched. He described the nest as consisting of a flat mass of rushes and grass, about three feet in diameter. The whooping crane breeds throughout Manitoba, Assiniboia, and the Saskatchewan, northward. On June 17th, at Oak Lake, I bought a clutch of two eggs that were collected by a boy on the prairie, north of Oak Lake: these are yellowish drab, blotched with pale brown and greyish purple, and measure 3.90x2.53 and 3.95x2.55. Another clutch of two eggs in my collection were taken near the mouth of the Red River of the North, near the shore of Lake Winnipeg; here are extensive swamps and small lakes. The great marshes about the mouth of the Red River extend for miles, and are probably the largest duck grounds in the North-West. Here, in the fall of the year, ducks and geese congregate in myriads, while in summer these swamps offer suitable nesting-places for whooping cranes, little brown cranes, bitterns, western grebes, rednecked, horned, and eared grebes, also three or four species of gulls, and a number of varieties of ducks and rails, and other birds. The eggs of the whooping crane are large and attractive; the ground colour is light brownish drab, some having a yellowish or olive buff tinge: they are blotched, spotted, and splashed chiefly around the largest end with pale chocolate brown and purple grey shell markings: some eggs have little elevations on them like warts. In a series of twenty eggs before me, the largest measures 4.30x2.28 and 4.25x2.37. These eggs are very elongated, and pointed at the smaller end:

they were taken in Montana, June 3rd, 1888. The nest was found in a marsh, and consisted of a mass of rushes, about a foot high, and three feet in diameter. The cranes never lay more than two eggs, though some authors say the number of eggs laid are two or three, but I never heard of any one taking a clutch of three eggs, and all the clutches I have had passing through my hands contained but two eggs. This tall and stately bird has the most imposing appearance of any bird in this country. The adult is pure white, with black-tipped wings, and stands nearly five feet high.

Dinner being over, I went to the farm at Rush Lake as prearranged, for this afternoon we were to visit a den of prairie wolves who for some time had caused a deal of trouble around the farm by killing several lambs, but the day of reckoning had come, so the farm manager, myself and two cowboys set out with guns, and the boys took a spade each with them. We were also accompanied by the three hounds and two setters, and presented a formidable party. We found the den two miles south-west of Rush Lake up the side of a gorge, and the dogs tried to dislodge the occupants, but their howling and barking only made the inmates retire to the far end of their den. There was nothing left but to dig the wolves out, so calling the dogs off the cowboys set to, one enlarging the entrance to the burrow while the other commenced to dig a few yards from the entrance, intending to let daylight into their den from the top. As this was slow work, some time elapsed before the boys made much progress, and the dogs were laid down a few yards in front of the mouth of the burrow, and the manager and myself were also sitting down conversing about wolves, when we heard the cowboy at the entrance to the den hollow out, and as we glanced up a wolf dashed by us, and another immediately bounded out of the den, and the cowboy struck at it with his spade, but missed, and before we could lay hold of our guns the dogs were up and bounding after the wolves as fast as they could go, and we were afraid to fire on them for fear we might hurt the dogs; in fact they took us so much by surprise that the wolves were some distance away before

we could get on our feet. We ran after the dogs down the gorge and on reaching the open prairie we could hear a tremendous howling and barking, and there a short distance away was the wolf at bay surrounded by the dogs. On arriving at the scene we found both the wolf and the dogs bleeding. The manager encouraged the dogs, and they then made a savage attack on the wolf. One seized him by the hind leg and one of the largest hounds had hold of his throat; the poor brute was outnumbered, as there were five to one: they soon pulled him down and his piteous howls began to get fainter. The manager tried to call the dogs off, but they were too eager in the fight, but as the wolf had ceased to howl we beat the dogs off and found the wolf almost dead, and one of the cowboys shot him through the head to put him out of his misery. His skin was too badly torn to make a specimen of it, so we left him for the turkey vultures. We found the dogs bleeding from several wounds, so we took them to a stream and the manager bathed their wounds and tied pieces of his handkerchief round the leg of one of the hounds which the wolf had badly bitten.

The prairie wolf is about the size of a sheep dog, and the fur is ashy grey, and the tail is bushy. They are very plentiful in this district, and burrow like foxes. They are exceedingly swift of foot. They never attack man, even when a number of them are together. They live on birds and small animals, and sometimes attack lambs and young sheep. There is another species of wolf found in this district, and it is especially numerous in the wooded Red Deer River region. This is the large grey wolf. It is also found around Lake Winnipeg, in fact it frequents all the timber lands stretching between Lake Superior and the Rocky Mountains. This species, like the wolves of Russia, has been known to attack human beings when pressed by hunger. The grey wolf is as large as a Newfoundland dog. One was killed by one of my collectors, near Shoal Lake, Manitoba, in the following manner: During the spring of this year he had lost several lambs, by a wolf coming at night to his farm and taking them away. At last this wolf got so bold as to visit the farm every



DEATH OF THE PRAIRIE WOLF.

night, with the general result of the disappearance of a lamb or young sheep. So one night my collector and his father and brother laid ready with guns for the appearance of Mr. Wolf. They tied a sheep to a fence, and erected a screen of timber close to the sheep, and behind this they waited the approach of the wolf. They were not disappointed, for they at last saw his form approaching cautiously. The sheep began to bleat and tried to break away from the cord, and just as the wolf was about to seize its prey, the father and two brothers poured a volley of shot into the carcass of the wolf, which caused him to bite the ground in agony. Then loading their guns again they gave him another dose, which stretched him lifeless on the ground. After this they were not troubled with wolves again. The grey wolf sometimes chases deer, Sir John Richardson saw one at Point Lake chasing a fine buck reindeer. The wolf ran down the deer and disabled it by a bite on the flank. An Indian, who was concealed on the borders of the lake, ran out and cut the deer's throat with his knife, when the wolf at once relinquished his prey and sneaked off. In the chase the poor deer urged its flight by great bounds, which for a time exceeded the speed of the wolf, but it stopped so frequently to gaze on its relentless enemy, that the latter, toiling on at a long gallop, with its tongue lolling out of its mouth, gradually came up. After each hasty look, the poor deer redoubled its efforts to escape: but either exhausted by fatigue, or enervated by fear, it became, just before it was overtaken, scarcely able to keep its feet. The grey wolves destroy many foxes, which they run down if they perceive them on the prairie at a distance from their burrows; they carry them off in their mouths, as easily as a terrier does a rat. When buffaloes were plentiful on the prairies, bands of wolves were always found hanging on the skirts of the bison herds, preying on the young and sickly calves, or on any old buffalo, which could not keep up with the herd. Wolves never attacked the full-grown animals, for hunters state they often used to see wolves walking through a herd of bulls without exciting the least alarm, and the

Indians, when cautiously stealing towards the buffalo for the purpose of shooting them, often covered their heads and backs with a wolf skin, knowing from experience that they would be suffered to approach near in that guise. Grey wolves have been known to visit a sportsman's camp during the night and carry off one of his dogs, and some years ago a poor Indian woman was strangled to death near her wigwam by a wolf, before the eyes of her husband, who was hastening to her assistance.

On our return to Rush Lake, I flushed a McCown's longspur from its nest and five eggs, and we disturbed several marbled godwits, curlew, willets and grouse, but the dogs ran along in front of us and disturbed the birds, so that we were unable to find their nests. I had my supper at the farm, and spent the evening there, until dark, when I returned to the station-house.



CHAPTER XIII.

JUNE 14th.—This being my last day at Rush Lake, as I intended to return in the evening to Moosejaw, I was out soon after breakfast and ascended the hilly prairies south of Rush Lake. My first find was a nest of the sharp-tailed grouse with eleven eggs. The bird was flushed from a patch of long grass, and the nest was a hollow in the ground, lined with grass and feathers. The eggs are deep tawny buff, speckled with darker brown. Soon afterwards I found a nest of McCown's longspur containing three eggs: these eggs were greyish white, blotched with dark purplish brown. Saw a turkey buzzard and a pair of marsh harriers: both species evidently had nests close by, but I could not find them. I was disappointed at not finding the snowy owl around Rush Lake, as I was informed by Macdonald and others that they were occasionally seen, and was shown a fine stuffed specimen at the station-house that was shot late in the spring of 1889; this bird was a female. Though they are occasionally seen in summer at Rush Lake, they become more plentiful in the fall and winter when the ducks and geese are migrating south. Macdonald, who has spent some years in the North Saskatchewan, never saw a nest of this bird, but he has seen the birds in summer, so that it is probable a few snowy owls do not retire to within the arctic circle to breed, but nest further south, on the marshy prairies of Manitoba and Assiniboia, almost reaching the northern border of the United States. It is reported as probably nesting on the Island of Anticosti, in the Gulf of St, Lawrence, as it certainly does in Labrador and Newfoundland. It is also recorded as a rare summer resident around Lakes Winnipeg and Manitoba. In Great Britain, an instance is recorded of its breeding near Banff, in Scotland. The nest containing young birds was found by the

Scotch naturalist, Thomas Edwards. It is a common summer resident in Iceland, Norway, Lapland and Finland. The snowy owl frequents marshes, and its habits are similar to the short-eared owl, and, like that bird, it makes its nest on the ground. A clutch of eight eggs in my collection are from Finnmark, and were taken May 25th, 1886; the nest was on the ground, in a swamp, and consisted of a pile of rushes with a hollow at the top lined with feathers. The food of the snowy owl consists of hares, muskrats and other small animals, as well as birds. The true home of this bird is in the frozen north, and its plumage is well adapted to stand the cold climate, as scarcely a point is exposed. The bill is almost hidden in a mass of feathers that cover the face, the legs are clothed with such long, thick, hair-like plumage as to appear nearly as thick as those of a middle-sized dog, the claws only being visible; these are large, black, much hooked and extremely sharp. The entire plumage below the surface is of the most exquisitely soft, warm and elastic kind, and so closely matted together as to make it a difficult matter to penetrate to the skin. The snowy owl is a regular winter visitor to the island opposite Toronto, and I have a handsome specimen that was shot there during the fall of 1889. Our local taxidermist usually receives a dozen specimens to preserve every winter, and I have seen specimens hung up in the poultry stores. During October, 1889, I saw a snowy owl six miles north of Toronto. it was perched on a tree and flew off as I approached. I had not a gun with me, but I followed the bird from tree to tree and from one patch of timber to another, often getting pretty close to it. It was late in the afternoon and getting dusk, but so interested was I in this bird that I followed it until I lost my way. As it was fast getting dark I began to get alarmed, and looked around for the light of some farm house so that I might inquire in which direction Toronto lay; I crossed from one wood to another, until at last I came across a narrow road and followed this for nearly a mile, but found it only led to some fields, so I turned back again and followed the road in the other direction; it was now dark and very chilly, and I

felt very uneasy, as I did not want to have to stay out all night for I knew this would alarm them at home, for they often say I shall get killed through climbing trees after hawks' nests. At last the light of a farm house glimmered up before me and on enquiring my way to Toronto found I was seven miles away and that it was after seven o'clock. On reaching home two hours later I found my wife in a state of excitement, wondering what could have befallen me. Two weeks after this I saw another snowy owl perched on a flag-staff over a store in one of our principal streets: a crowd of people were gazing up at it, and those passing in vehicles pulled up to have a look at the bird: this was about five o'clock, I passed the place at ten o'clock at night, it was still there but had gone the following morning.

There are three other species of owls that are frequently shot at Rush Lake, viz.: The great grey owl, Richardson's owl, and American hawk owl. All three species breed in the Red Deer river region, and northward to Edmonton, this district being well wooded is suitable to the habits of these species. The great grey owl is common on the borders of Great Bear Lake. Dr. Richardson found a nest late in May, it was built in a lofty balsam poplar, and was composed of sticks, with a lining of feathers. It usually lays two or three white eggs, which are not larger than the eggs of the great horned owl. I have a fine specimen that was shot in the forests north-east of Winnipeg, early in summer. This species is a rare summer resident in the wooded regions around Lake Winnipeg and Manitoba. Richardson's, or Tengmalm's owl inhabits all the wooded country, stretching from Great Slave Lake to Northern Montana. It is also common in the wooded districts bordering the Red River of the north. A clutch of five eggs, collected near Edmonton, May 2nd, 1890, average in size 1.34x1.12: they were taken from a nest in a poplar, the nest being made of sticks and lined with leaves. During the spring of 1887, I had a number of clutches of eggs of Tengmalm's owl collected for me in Asia Minor, the number of eggs to a set were four and five, and the nests were all

built in trees, made of sticks, etc. This is the smallest of European owls. The American bird is considered a geographical race of *nyetala tengmalmi* of Europe, as ascertained by Mrs. Ridgeway's studies. It differs from its congener, just as the American hawk owl does in an excess of darker colours of its plumage.

But to resume our journey, I ascended the hilly prairie and examined several deep ravines, called coulees, for I thought it probable that the prairie falcon and Ferruginous' rough-legged hawk might be nesting on the sides of some of these ravines, but in this I was disappointed. On reaching the summit of the long, elevated ridge south of Rush Lake, I expected to find a valley on the other side, but instead I found a hollow basin and another ridge beyond that. I ascended the next ridge and found still another hollow beyond that. I walked for over a mile on those rolling hills of prairie, but found it very monotonous. This track stretches for two hundred miles to Montana, and not a tree or scarcely a shrub is to be found in this wilderness. The hills are simply covered with short grass, and have a barren appearance: neither was there a bird or any living creature to be seen. Over this vast track of rolling prairie silence as of the grave reigns supreme from morning until night, and the spirits of the most buoyant traveller sink as he wanders deeper and deeper into this terrible silence. A strange, lonely feeling came over me, caused by this dead silence and the strangely barren surroundings, so I turned back and descended into Rush Lake Valley. I flushed a marsh harrier off its nest, but was disappointed to find it empty. This nest was composed of rushes and grass, circular shaped, and built on the ground, the material standing about four inches high, and the centre hollowed somewhat. I came across a stream that flowed between the hills, and followed it in its descent to the valley; on reaching the level prairie, the stream became deeper, and rushes commenced to grow along its banks, and ducks again began to be numerous. I flushed a number from this creek, but most of them had young ones, the only nest I found was that of the green-

winged teal, containing nine eggs. This nest was concealed among the rushes which fringed the creek, and was a circular hollow, the size of a small plate, and was well lined with down. The eggs are similar to those of the blue winged teal, but appear to be somewhat of a deeper buff. They average in size 1.75x1.30. As it was near dinner-time, I returned to the station-house, and after dinner blew the remainder of the eggs collected, and then packed up my specimens and baggage. Taking leave of the friends I had made during my stay at Rush Lake, and who had helped to make my sojourn in this district so enjoyable, I left by the afternoon train for Moose-jaw, feeling exceedingly sorry at not being able to spend a few weeks longer among those profitable collecting grounds.

Before returning to the east, perhaps it will not be out of place to devote a chapter to the Rocky Mountains, in case any of my readers should ever visit this grand range, but bird-nesting amongst this stupendous range is full of risks and dangers, as grizzly bears and pumas are met with when least expected, but then men never came all this way for birds' eggs or birds either, the fellows who visit these parts are keen sportsmen, and hunters after big game. They want to visit the haunts of the grizzly, big-horned sheep, snowy goats, etc., which they can easily find, providing they are game enough to follow their guide. The following notes have been gathered from sportsmen who have hunted among the Rockies, and may be a guide to those intending to visit the mountains for the same puipose.



CHAPTER XIV.



EAVING Rush Lake and going westward, the railway skirts the base of the Cypress Hills for many miles, following what seems to be a broad valley and crossing many clear little streams making their way from the hills northward to the Saskatchewan. At Maple Creek we see the red coats of the mounted police, who are looking after a large encampment of Indians near by: the Indians are represented on the station platform by braves of high and low degree, squaws, and papooses, mostly bent on trading pipes and trinkets for tobacco or silver; a picturesque-looking lot, but dirty withal. Leaving the station, we catch sight of their encampment a mile away—tall, conical tepees of well smoked cloths or skins; Indians in blankets of brilliant colours, hundreds of ponies feeding in the rich grasses, a line of graceful trees in the background, seemingly more beautiful than ever because of their rarity, all making, with the dark Cypress Hills rising in the distance, a picture most novel and striking. Two hours later we descend to the valley of the South Saskatchewan, and soon arrive at Medicine Hat. The broad and beautiful Saskatchewan river affords steamboat navigation a long way above, and for a thousand miles below Medicine Hat. Crossing the river on a long iron bridge, we ascend to the high prairie, now a rich pasture, dotted with lakelets which swarm with pelicans, gulls, plovers, ducks and geese. Everywhere the flower-sprinkled sward is marked by the deep, narrow trails of the buffalo, and the saucer-like hollows where the shaggy monsters used to wallow, and strewing the plains in all directions are the whitened skulls of these noble animals. now so nearly extinct. The bones are now being gathered and are used extensively for sugar refining, and we see great piles of bones and skulls at intervals along the railway sid-

ings. The time will come when buffalo horns and skulls will be valuable. Medicine Hat is the cream of the antelope country, and a rich ornithological centre, but before the oologist goes out collecting he should be provided with a pair of long boots or extra thick leather leggings, as this is a district where rattlesnakes are plentiful. Fortunately the rattlesnake always sounds its rattle for a few seconds before he darts his head at the intruder to bite his legs and this gives an opportunity to run out of the way or blaze away at him with a gun. When approaching the haunts of rattlesnakes on horseback the rider can easily tell when danger is near, for the horse commences to tremble from head to foot with fear, and when a horse finds a rattlesnake concealed in his path he springs wildly to one side and bounds away over the prairie, often throwing his rider if he is not on the lookout for such troubles. Deaths are occasionaly caused through rattlesnake-bites, the best remedy for which is to suck the poison out of the wound as quickly as possible and tie a handkerchief tightly round the limb that is bitten. Another good remedy is to drink a gill of whiskey, for if you can get under the influence of alcohol before the poison has taken effect there is little danger .

As we approach Crowfoot station all are alive for the first view of the Rocky mountains, yet a hundred miles away, and soon we see them—a glorious line of snowy peaks rising straight from the plain and extending the whole length of the western horizon, seemingly an impenetrable barrier. As we speed on, peak rises behind peak, then dark bands of forest that reach up to the snow line come into view ; the snow-fields and glaciers glisten in the sunlight, and over the rolling top of the foothills the passes are seen, cleft deep into the heart of the mountains. We are now in the country of the once dreaded Blackfeet, the most handsome and warlike of all the Indian tribes, but now peacefully settled in a reservation near by.

We have been running parallel to the tree-lined banks of the Bow river, and now, crossing its crystal waters, we find

ourselves on a beautiful hill-girt plateau, in the centre of which stands the town of Calgary, at the base of the Rocky Mountains, 2,262 miles from Montreal, and 3,416 feet above the ocean. Before us the mountains rise in varied forms and in endless change of aspect, as the lights and shadows play upon them; behind us is the great sea of open prairie: northward is the wooded district of Edmonton, and the North Saskatchewan, full of moose, elk, bear, wolves, foxes and all manner of fur-bearing animals and winged game; southward, stretching away one hundred and fifty miles to the United States boundry, is the ranching country. You may be sure of a cordial welcome should you visit the ranchmen, and it will be worth your while to do so. You will find them all along the foot hills, their countless herds feeding far out on the plain. Cattle and horses graze at will all over the country, summer and winter alike. The warm "Chinook" winds from across the mountains keep the ground free from snow in the winter, except for two or three days at a time, and the nutritious and naturally-cured grasses are always within reach of the cattle. All along the base of the mountains, clear streams come down to the plain at frequent intervals, and there is timber in plenty throughout the foothills. The soil is rich and deep, game is very abundant, and the climate matchless. Leaving Calgary and going westward again, following up the valley of the Bow, the gradually increasing river terraces and the rounded, grassy foothills, on which innumerable horses, cattle and sheep are feeding, shut out the mountains for an hour or two. Morley station, a few miles from the entrance to the Rockies, is a good centre for the sportsman to start from. Here the needful outfit of provisions, etc., can be secured, also a few Stoney Indians as guides, trackers and helpers, and they will show the way to the haunts of mountain sheep, goat, bear, etc. Naturally the construction of the railway drove the game back a short distance from the track, but the Indians know where the different species are to be found, and they are thoroughly good hunters, and perfectly reliable guides. Temporary accommodation



ROCKY MOUNTAINS NEAR CALGARRY.

will be found at Morley. Of winged game, the dusky or Richardson's grouse, is plentiful in the wooded foothills above Morley, they are found especially numerous northward among the high bluffs, which are covered with dense pine trees. They are also found in Northern Montana. A set of nine eggs in my collection, collected north of Morley, June 4th, 1890, were taken from a nest made on the ground, near a fallen tree; the nest consisted of a hollow in the ground, lined with leaves, and the eggs are rich, creamy buff, finely spotted all over with reddish brown, and average 1.85x1.30. The white-tailed ptarmigan also inhabits this section of the Rocky Mountains. They are found above the timber line, among the craggs of the highest peaks; the nest is merely a depression in the ground, lined with grass, and the eggs are light buff brown, thickly spotted with chocolate brown, size 1.68x1.15, The eggs of this bird are difficult to obtain, and are exceedingly rare in collections.

The willow ptarmigan also breeds in the Rocky Mountains of Alberta; although the birds are plentiful, the eggs are difficult to procure. They breed in the valleys and do not ascend to the highest peaks like the white-tailed ptarmigan. The willow ptarmigan is common in Northern Europe, and I have a large series of eggs collected in Lapland. The nests are described as being merely hollows in the ground, lined with grass and leaves, and the number of eggs to a clutch is from eight to twelve. The eggs of this bird are very handsome, varying from a ground colour of cream to yellowish buff, thickly spotted with rich brown and black. They are, however, surpassed in beauty of colouring by the eggs of the rock ptarmigan, although both Mr. Ridgway and Mr. Oliver Davie say the reverse. In "Nests and Eggs of North American Birds," by Oliver Davie, it is stated that "the eggs of the rock ptarmigan, with certainty, cannot be distinguished from those of the willow ptarmigan, but are described as usually less heavily spotted and less densely marked, averaging lighter in colour and less in size." Now I have found this to be just the reverse as regards colour and marking; although the eggs of the rock

ptarmigan are smaller than those of the willow ptarmigan, they are much heavier marked. In an open drawer before me I have a series of sixty willow ptarmigan eggs, and also one hundred and forty eggs of the rock ptarmigan, and the eggs of the latter are more handsome than those of the willow ptarmigan. The ground colour of yellowish buff is almost concealed by the blotches of rich blackish brown, and under these heavy blotches are smaller spots of sienna brown; the ground colour struggles to appear beneath the heavy overlying colour. The number of eggs to a clutch varies from seven to twelve, though clutches of ten, eleven and twelve seem to be the regular run. I don't think the rock ptarmigan ever lays more than twelve eggs. During the past five years I have received some five hundred eggs of this species from Iceland where this bird is common, and twelve is the largest clutch I ever obtained. In Iceland the rock ptarmigan makes its nest on the ground, it consists of a hollow scraped out by the bird, and this is lined with grass and leaves.

Perhaps the changes of plumage in none of the feathered tribes are more worthy of attention than those the ptarmigans undergo. Their full summer plumage is of a yellow more or less inclining to brown, beautifully barred with zig-zag stripes of black. Their winter plumage is pure white, except that the outer tail feathers and shafts of the quills are black.

Leaving Morley Station we suddenly come upon the Rockies, grand and stern, and close at hand. For more than six hundred miles, and until the Pacific is reached, they will be constantly with us. Castle Mountain looms up ahead on the right, a sheer precipice of 5,000 feet, a giant's keep, with turrets, bastions and battlements complete. We enter an almost hidden portal, and find ourselves in a valley between two great mountain ranges. At every turn of the valley, which is an alternation of precipitous gorges and wide parks, a new picture presents itself—seen in all its completeness from the observation car, now attached to the rear of the train. The beautiful river now roars through a narrow defile, now spreads out into a placid lake, reflecting the forest, cliffs, and snowy summits.

Peaks and vast pyramids of rock with curiously contorted and folded strata, are followed by gigantic castellated masses, down whose sides cascades fall thousands of feet. The marvellous clearness of the air brings out the minutest detail of this Titanic sculpture. Through the gorges we catch glimpses of glaciers and other strange and rare sights, and now and then of wild goats and mountain sheep grazing on the cliffs far above us, near the snow line. The mountains would be oppressive in their grandeur, their solemnity, and their solitude, but for an occasional mining village or a sportman's tent which gives a human interest to the scene. Three hours after leaving Calgary, we pass the famous anthracite mines near the base of Cascade Mountain, and soon after stop at the station of Banff, already famous for its hot and sulphurous springs, which produce wonderful curative powers, and which attract people from great distances. The district for miles about has been reserved by the Canadian Government as a national park, and much has already been done to make its beauties accessible. Banff possesses a large and handsome hotel, perched on a hill overlooking the beautiful valley of Bow River. Half a dozen ranges of magnificent snow-tipped mountains centre here, each differing from the others in form and colour; and the converging valleys separating them afford matchless views in all directions. Well made carriage roads and bridle paths lead to the different springs and wind about among the mountains everywhere. Should a brief sojourn here be decided upon, the sportsman may enjoy very good duck shooting on the Vermillion Lakes, a short distance from the hotel. In summer several species of ducks are reported as breeding here, amongst them being Barrow's golden eye and the harlequin duck, as well as several common species.

Five miles from Banff is Devil's Lake, a sheet of water twelve miles long and one mile in width. Here also Barrow's golden eye and harlequin duck are summer residents, along with gulls and other waterfowl. Barrow's golden eye has been found nesting as far south as the mountains of Colorado. Though this bird nests among the mountain lakes of the

Rockies, its eggs are seldom obtained in this regioh. Most of the eggs of this species in collections are from Iceland where this bird is common, and on an average I receive one hundred eggs with nests of down every year from that country. The nests are usually built in hollow trees or decayed tree stumps, here the eggs are laid in a bed of greyish white down. Frequently two females lay their eggs in one nest on account of the scarcity of hollow trees and convenient nesting-places, and when this happens, as many as twenty-four eggs are found in one nest. I have sets of nineteen, twenty, twenty-three and twenty-four, in each of these cases two females laid their eggs together in the same nest. The number of eggs laid by one female is generally from ten to fourteen. The eggs can easily be distinguished from those of the common golden eye by their larger size and paler pea-green colour. They average in size 2.38x1.72.

The harlequin duck is another species whose eggs are seldom collected on this continent, although it is a summer resident on many of the mountain lakes of the Rockies, chiefly north of the United States boundary. Dr. Coues found broods of young ones in August 1874, swimming in the streams which empty into Chief Mountain Lake in Montana. The harlequin duck is known to breed in Alaska, and amongst the numerous lakes stretching between Alaska and Hudson's Bay. Audubon found it breeding in Labrador, and it also nests in Newfoundland. In Europe it is common in Iceland, as I can testify by the number of clutches and nests I receive from there annually. The eggs are easily distinguished from those of the European widgeon by their larger size, broader shape, and deep yellowish buff colour. Three ordinary sized specimens measure 2.28x1.72, 2.30x1.67, and 2.25x1.70, respectively. Prof. Ridgway, in his manual, describes the eggs of this species as being buffy-white or pale buff, and adds, identification doubtful. None of my eggs from Iceland can be called pale buff. This description may be applied to the eggs of the widgeon, but not to the harlequin. The eggs of the latter are deep rich buff, some having a yellowish tinge, others are pale buffy cin-

namon. The nests of the harlequin duck are made of dark greyish brown down, and like the down of most other ducks can be identified by an experienced eye as easily as the eggs themselves. Thus it is impossible to confound the downy nest of Barrow's golden-eye with that of any other duck, likewise the down of the harlequin, long-tail, eider, goosander, and other species are as distinct in colour from each other as the eggs themselves. The nests of down of the duck family are beautiful objects, and when the eggs are placed inside the nests in the cabinet, they look very attractive.

The harlequin does not lay so many eggs as most other ducks do, five to seven being the usual number. During the last five years I have received from my Iceland collector over two hundred eggs of this species, consisting of two clutches of eight eggs, nineteen clutches of seven, and twelve clutches of six, so that six and seven seem to be the regular number of eggs laid. The male harlequin duck has beautiful variegated plumage, and in some places they are called "lord and lady ducks."

At Banff, fine mountain trout fishing can be had on the Bow and Cascade rivers, also deep trolling for lake trout in Devil's Lake. White and Indian guides can be secured for extended trips into the mountains after bear, sheep or goat.

Resuming our journey through the Rockies, we are soon reminded, by the increasing nearness of the fields of snow and ice in the mountain slopes, that we are reaching a great elevation, and two hours after leaving Banff our train stops at a little station, and we are told that this is the summit of the Rocky Mountains, just a mile above the sea; but it is the summit only in an engineering sense, for the mountains still lift their white heads five thousand to seven thousand feet above us, and stretch away to the north-west and the south-west like a great backbone, as indeed they are,—the "backbone of the continent." Two little streams begin here, almost from a common source. The waters of one find their way down to the Saskatchewan and into Hudson's Bay, and the other joins the flood which the river Columbia pours into the

Pacific Ocean. Passing three emerald lakes, deep set in the mountains, we follow the west-bound stream down through a tortuous rock-ribbon canon, where the waters are dashed to foam in incessant leaps and whirls. This is Kicking-horse Pass. Ten miles further we round the base of Mount Stephen, a stupendous mountain rising directly from the railway to a height of more than eight thousand feet, holding on one of its shoulders, and almost over our heads a glacier whose shining green ice, five hundred feet thick, is slowly crowded over a sheer precipice of dizzy height, and crushed to atoms below. This glacier is a crescent-shaped river of ice, the further end concealed behind the lofty yellow cliffs that hem it in. You seem to be almost on a level with it, and at a distance of only five miles or less, but it is 1,300 feet above you and over a dozen miles away and almost inaccessible by reason of the ravines, rocks and forest which intervene. The scenery is now sublime and almost terrible. The railway clings to the mountain side at the left, and the valley on the right rapidly deepens until the river is seen as a gleaming thread over a thousand feet below. Looking to the north, one of the grandest mountain valleys in the world stretches away to the north, with great white glacier-bound peaks on theother side. Looking ahead, the dark angular peak of Mount Field is seen. Still following the river, now crossing deep ravines, now piercing projecting rocky spurs, now quietly gliding through level park-like expanses of greensward, with beautiful trees, pretty lakelets and babbling brooks, we soon enter a tremendous gorge, whose frowning walls, thousands of feet high, seem to overhang the boiling stream which frets and roars at their base, and this we follow for miles half shut in from the daylight. Along this vast chasm the railway runs along the edges of the cliffs, and as we glance out of the car windows and look down a thousand feet below we shudder at the thoughts of the train leaving the track and tumbling to the depths beneath. What with the roar below and the noise of the train, increased a hundred-fold by the echoing walls, the passage of the terrible gorge will never be forgotten.

Two hours later the gorge suddenly expands, and we see before us high up against the sky a jagged line of sunny peaks of new forms and colours. A wide, deep, forest-covered valley intervenes, holding a broad and rapid river. This is the Columbia. The new mountains before us are the Selkirks, and we have now crossed the Rockies. We reach the town of Golden on the Columbia river, and from here a steamer makes regular trips up the river to the lakes at its head, distant about 100 miles, thus offering an easy and most attractive route to a fine game district. Here cāribou deer, bears, and other animals are found in the forests bordering the river, and a great variety of ducks and waterfowl also abound. Sweeping round into the Columbia valley we have a glorious mountain view. To the north and south, as far as the eye can reach, we have the Rockies on the one hand and the Selkirks on the other, widely differing in aspect, but each indescribably grand. Both rise from the river in a succession of tree-clad benches, and soon, leaving the trees behind, shoot up to the regions of perpetual snow and ice.

Crossing the Columbia and following down through a great canon, through tunnels and deep rock-cuttings, we shortly enter Beaver Valley, and commence the ascent of the Selkirks, and then for twenty miles we climb along the mountain sides, through dense forests of enormous trees until near the summit we find ourselves in the midst of a wonderful group of peaks of fantastic shapes and many colours. At the summit, four thousand five hundred feet above tide-water, is a natural resting-place. a broad level area surrounded by mountain monarchs, all of them in the deadly embrace of glaciers. Strange under this warm summer sky to see this battle going on between rocks and ice,—a battle begun æons ago and to continue for æons to come! To the north and so near us that we imagine that we hear the crackling of the ice, is a great glacier whose green fissures we can plainly see. To the south is another, vastly larger, by the side of which the greatest of those of the Alps would be insignificant. Smaller glaciers find lodgment in all the mountain benches and slopes, whence

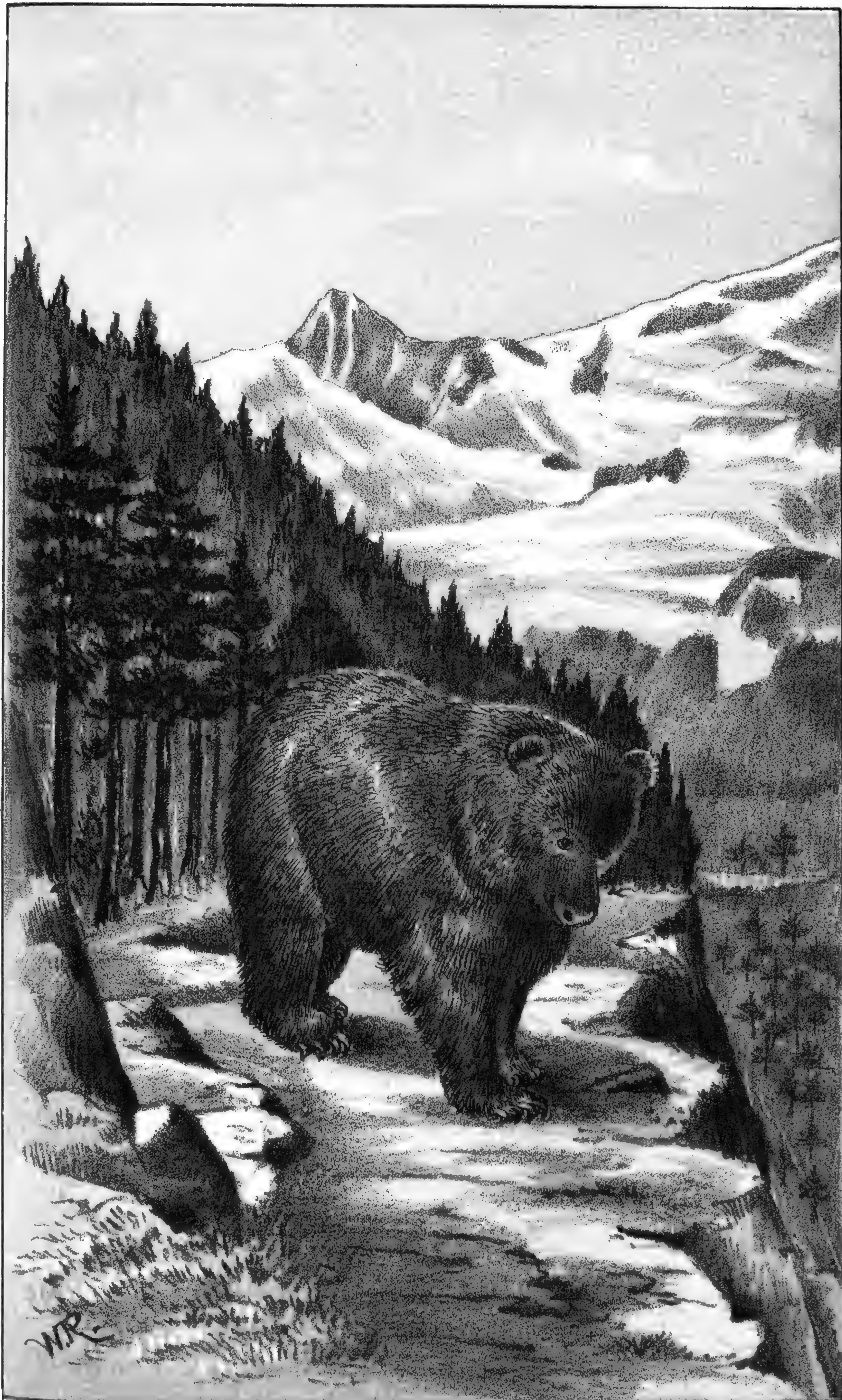
innumerable sparkling cascades of icy water come leaping down.

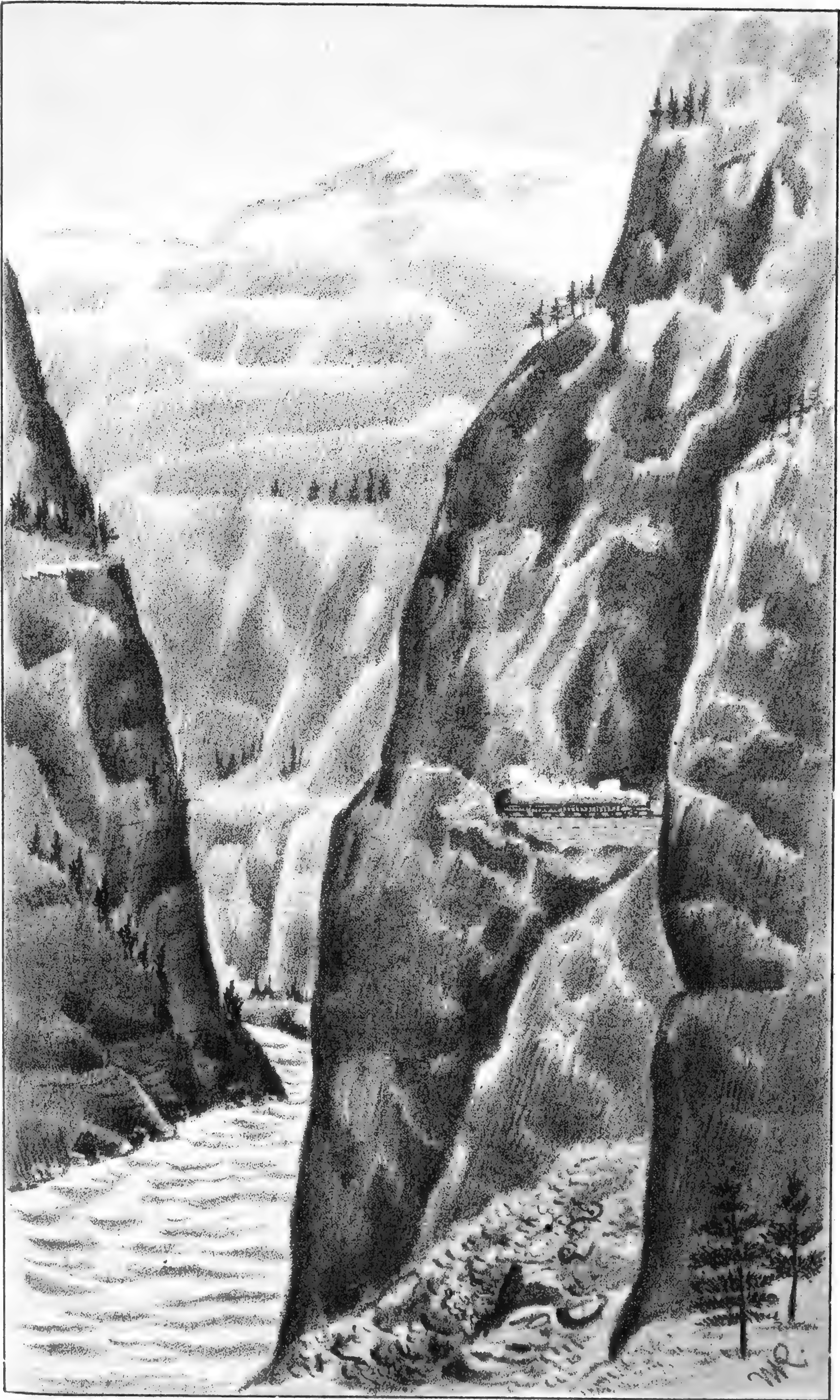
Descending westerly from the summit we reach in a few minutes the Glacier House, a delightful hotel situated almost in the face of the great glacier and at the foot of the grandest of all the peaks of the Selkirks—Sir Donald—an acute pyramid of naked rock shooting up nearly eight thousand feet above us.

Near by is Asulkan Mountain, Asulkan meaning in the Indian tongue "the home of the white goat." Securing a guide here, you can climb the mountains with almost a certain chance of getting goat, big horned sheep and grizzly, brown and black bears. A Toronto artist, three years ago was sketching on this mountain, and while engaged in his work he glanced in front of him, when to his horror he saw a tremendous grizzly bear coming straight towards him along the mountain side, not more than a quarter of a mile off. He at once sprang to his feet, leaving his picture, easel and colours, and ran as fast as he could down to the Glacier House, two miles off, which he reached as pale as a sheet and panting for breath, it was some minutes before he could gasp out "he had seen a grizzly." An hour afterwards he was persuaded to return with three others who took rifles along with them and they went back to the place where he had left his picture, on arriving there the grizzly was nowhere to be seen, but there lay the easel broken into matchwood and the picture also destroyed, showing that the grizzly had trampled upon them.

Resuming our journey, we plunge again for hours through precipitous gorges, deep and dark and again across the Columbia river. The river is wider and deeper here, and navigated by steamboats southward for nearly two hundred miles. At Revelstoke, a mining district, are large works for smelting silver ore.

We are now confronted by the Gold Range, another grand, snow-clad series of mountains. The deep and narrow pass through this range takes us for forty miles or more between parallel lines of almost vertical cliffs, when a sudden flash of


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FRAZER RIVER CANYON.

light indicates that we have emerged from the pass, and we see stretching away before us the Shuswap lakes, whose crystal waters are hemmed in by abruptly rising mountains. This is a fine section for game. To the north is a great caribou range, and upon all the higher mountains are bands of white goats, while scattered wherever their fancies choose are promiscuous families of bears interesting brutes, no doubt, but not to be encouraged to any closer intimacy than point-blank rifle range.

After travelling through these beautiful lakes for two hours the valley of the South Thompson River is reached—a wide, almost treeless valley, occupied by farms and cattle ranches. Then comes Kamloops, the principal town in the interior of British Columbia, further on the railway winds its way for hours through rugged mountains, and we suddenly cross the deep black gorge of the Fraser River on a massive steel bridge, and then enter the famous canon of the Fraser. The views here change from the grand to the terrible. Through this gorge, so deep and narrow in many places that the rays of the sun hardly enter it, the black and ferocious waters of the great river force their way. We are in the heart of the Cascade range, and above the walls of the canon we occasionally see the mountain peaks gleaming against the sky. Hundreds of feet above the river is the railway, notched into the face of the cliffs, now and then crossing a great chasm by a tall viaduct and disappering in a tunnel through a projecting spur of rock. For hours we are deafened by the roar of the waters below, and we pray for the broad sunshine once more. The scene is fascinating in its terror, and we finally leave it gladly, yet regretfully.

At Yale the canon ends and the river widens out, but we have mountains yet in plenty. We see Chinamen washing gold on the sand-bars, and Indians herding cattle in the meadows, and the villages of the Indians and collection of huts where the Chinamen congregate. Salmon drying on poles near the river give brilliant touches of colour to the landscape, and here and there we see the curious graveyards of the Indians

neatly enclosed and decorated with banners, streamers, and all manner of carved " totems."

A gleaming white cone rises towards the south-east. It is Mount Baker, sixty miles away, and fourteen thousand feet high. We cross large rivers flowing into the Fraser, all moving slowly here as if resting after their tumultuous passage down between the mountain ranges. As the valley widens, farms and orchards become more and more frequent, and our hearts are gladdened with the sight of broom, and other shrubs and plants familiar to English eyes, for as we approach the coast we find a climate like that of the south of England, but with more sunshine. Touching the Fraser River again we see Indians in their canoes all engaged in catching salmon, which visit these rivers in astonishing numbers, and which when caught are frozen and sent eastward by the railway, or canned in great quantities and shipped to all parts of the world.

Passing through a forest of mammoth trees, some of them over twelve feet in diameter, and nearly three hundred feet high we find ourselves on the still waters of the Pacific at the eastern extremity of Burrard Inlet. Following down the shore of this mountain-girt inlet for half an hour the train runs into the station at Vancouver, and our journey terminates.

Vancouver has a population of 15,000, until May, 1886, its site was covered with a dense forest, from May to July its growth was most rapid, but in July a fire spreading from the surrounding forests, swept away every house but one in the place, and every building now seen has been erected since that time. The situation of the city is fine, and it has splendid harbour facilities and commercial advantages. It has already extensive wharves and warehouses, many hotels, churches, schools, etc. It has many buildings of granite and brick, and some of its private residences would do credit to a city of a centurys' growth.

The scenery all around is magnificent, and the opportunities for sport are unlimited—mountain goats, bear and deer in the hills, trout fishing in the mountain streams, and sea fishing in

endless variety; a stay of a week here will be well rewarded. At many points on the coast one can obtain all the sport that he wants with deer, bear, grouse and water-fowl. And again, another field is open on Vancouver Island, that lovely land beloved of Englishmen. Within a short distance of the beautiful city of Victoria, game and California quail are very plentiful; a short journey into the interior of the island will bring you to the ranges of deer, bear, and other animals, added to these are several varieties of duck and other water-fowl, and last of all the English pheasant, introduced several years ago, and now perfectly acclimated and thriving wonderfully in the new land. The cry of "mark cock" or "ware hen" may sound strange to many, but the newly arrived Briton knows right well what it means, and what rare sport the long tails furnish, and its ten to one that he knows how to stop 'em too.

The following is taken from "Fishing and Shooting in the Canadian North-West," and gives a few pointers to the sportsman who intends to explore the region just traversed, after the noble game that abounds in the fine mountain ranges we have passed through. The pursuit of what is generally dubbed by the craft "big game," in the mountain wilds of Canada, is no childs' play. To be successful a man must possess iron nerve and unflinching determination: he must be a good shot and strong enough to stand rough work, for the latter is frequently necessary before the game can be reached, and the former is very liable to be an extremely useful accomplishment, especially if the quarry happens to be a grizzly bear:

"Sportsmen who have shot in the famous wilds of Africa and India are apt to feel proud of their lion, tiger, and other handsome skins that originally covered the works of some lithe and bloodthirsty big feline; but, with all due respect to them and their prowess afield, I would sooner have the hide of a grizzly of my own killing than half a dozen peltries of 'Leo' or 'Stripes' or any other cat that ever jumped.

"You can 'pot' your lion over a carcass, and be yourself, meantime, perfectly safe on some prepared post or natural stronghold; you can bore holes between the stripes of the fur

'blazer,' worn by his feline majesty of Bengal, while you yourself are squatted in a howdah strapped to the back of a twenty-odd-hand elephant, while a tribe of bare-legged natives yell and scream and hoot to keep their own courage up and drive the jungle prowler to 'Massah Sahib.' You will probably get the tiger, and, should he charge, experience an excitement something similar to that felt by a marine perched high in the maintop of some old-fashioned liner repelling boarders; but there is comparatively little peril in the whole business for you.

"Shooting the grizzly has none of these refining influences; the big plantigrade is always looking for trouble, and when he digs up the hatchet look out for squalls. You will have no friendly elephant, nor army of beaters to satisfy his craving for somebody's scalp; you start on his track, and follow him into his gloomy fastnesses amid a chaos of rocks, with your life in one hand and your rifle in the other; and, unless you are made of the right material, stop before the scent gets too hot, or peradventure you may be found empty handed by your party.

"However, this spice of dan—, or rather this danger spiced with a chance of escape, is very fascinating; and, if you would fain be fascinated to your heart's content, seek the Rocky Mountains or British Columbia, and enjoy your whim.

"And such fields for sport! not pen, nor brush, nor tongue can convey the proper idea of the sublimity of those marvellous mountains; they are something too imposing for mere words; they must be seen and studied. One must live among them and watch the glories of sunlight upon their everlasting snows and glaciers; must climb their steeps and breathe the cold, thin atmosphere of those dizzy elevations, and train his eyes to measure soaring pinnacles and dark abysses ere he can realize their stupendous grandeur. One must hear the thunderous voice of the whirling storms amid their peaks; the avalanche tearing the forests from their native slopes; the avulsion of crag and giant bowlder from buttresses frowning darkly above the clouds, and the booming echoes of waves of





PUMA AND GRIZZLY BEAR.

mighty sound breaking against the walls of unmeasured ravines ere the full power of those matchless monuments of the old-time war of forces is impressed upon the mind. And then the glory of laying low the game that haunts them. Right well did the Indian hunter know what tested manhood, when first he wrenched the great scimeter-shaped claws from the broad fore-paw of the dead grizzly and strung them around his neck as a token to prove a man. Things have changed with time, the rifle has supplanted the bow, but nothing has supplanted the grizzly; he is there yet, and king of the wilds, and his claws are yet the proudest ornament the savage can wear, and his skin the most valued trophy of the white sportsman. Up above the grizzly's range are found the white goats and the famous big-horn mountain sheep, both eagerly sought after by sportsmen; the latter especially, owing to the extreme beauty of their heads.

"Outside of the bears the sportsman runs little chance of getting into difficulty. True, it is claimed by some that the puma is an ugly customer, writers even go so far as to say that he is more dangerous than even the grizzly, and sometimes proves his superiority in a dispute over a carcass. Such statements I believe to be mere rubbish; for the puma, lithe and powerful though he be, is, to my notion, a great, long-tailed, be-whiskered coward, a bravo of most terrifying appearance, but mighty careful of his handsome skin; in fact, what he is generally termed by the herders and hunters—a big sneak-cat.

"The handsomest game of the Rockies is, of course, the noble elk, or wapti. Their immense branching antlers and the clean-cut, blood-like appearance of their heads make them particularly attractive ornaments for a gentleman sportsman's home, and they are in great demand. The species is now rare in many localities where they formerly abounded, but they are still plentiful among the foot hills of the Rockies, and they can also be found in the North-West Territories, and in Manitoba north of Selkirk, and in the Duck and Riding Mountains, and also between Portage la Prairie and Brandon, as already noted.

"Next to the elk ranks the caribou, and a right royal quarry he is. They are very plentiful about Eagle Pass, in the Selkirk range, and there should be no difficulty in securing fine specimens. They also abound in Manitoba in the region between Lakes Winnipeg and Manitoba, etc., and wonderful stories are told of great herds in the Peace River country.

"The several species comprising the game list mentioned above are distributed throughout the mountains in greater or lesser numbers, being plentiful wherever the conditions are favorable. More minute details concerning them are impossible in a book of this nature, and unnecessary, as the game, except at a point here and there, is as abundant as it was before the first rifle shot woke the echoes of those monstrous canons.

"The sportsman contemplating a trip by the Canadian Pacific Railway across the continent to these incomparable fields, must bear in mind that heavy weapons are needed for satisfactory work. Lighter ones may do—the Indians kill grizzlies with the lightest Winchester rifles—but my advice is to take a repeater of the heaviest make. Plenty of powder and lead means sure work if the rifle is held right, and by using such you will lose less wounded game, and greatly lessen the risk of a clawing from some infuriated bear. The Indians, it must be remembered, are greatly your superiors, both in the approach of, or retreat from, dangerous game: they steal noiselessly and patiently upon their victim, and never fire until they are at close range, and sure of dropping it in its tracks. You will not be able to accomplish this, and therefore require a weapon that will do deadly execution at any reasonable distance. Properly equipped you will drop your bear or elk cleanly and well: and when your holiday is done, and you are speeding homeward by the 'Royal Road,' with your muscles strong after glorious work, and your skin tanned by the mountain air, you will think over every moment of your outing; of the splendor of the sunrise, the magnificence of the scenery; the glaciers, the torrents, and the thousand and one marvels of the wonderland you have left; of your beautiful trophies, and of your reunion

with dear ones at home; and as you take your last backward glance, and your straining eyes catch the last glint of the snow-clad peaks you will say, 'My heart's in the mountains.'"



BANFF HOT SPRINGS HOTEL.

CHAPTER XV.



JUNE 15th.—Back again at Moosejaw, having arrived here last night from Rush Lake. I obtained the loan of a boat, and two of us set out to explore Moosejaw Creek. My companion, a local sportsman, took his gun along with him. First we rowed to a post that stood in the water, for here a woodpecker's nest had been found a few days previously. On arriving at the post a few blows caused the woodpecker to fly out of the hole and it settled on another post close by. It was the red-headed woodpecker, and after some trouble I reached the seven eggs, which I found resting on bits of decayed wood, nearly a foot below the entrance. The eggs were partly incubated. In this prairie region where trees are scarce, woodpeckers make their nests in the telegraph poles along the railway, and they frequently lay their eggs in holes under the roofs of farm houses and barns. We shot specimens of black terns, marbled godwits, red-winged starlings and other common birds, and took several clutches of eggs of the latter species. The nests were all suspended between growing rushes and were composed of fine rushes and grass. We flushed a rusty blackbird from one of the numerous islands at the ponds south of Moosejaw, through which the creek runs, and later on found its nest, which was built on the ground in a tussock of grass, and was made of fine grasses, etc., and contained four eggs of a greyish green ground color, thickly spotted with reddish brown and purple, averaging in size 1.00x.75. The rusty grackle is common between Winnipeg and Portage-la-Prairie, usually making its nest on the ground like a song sparrow. The eggs vary to a great extent, in some the ground colour is pale green, others have a grey or olive green ground, and they are generally well spotted and blotched with various shades of brown and purple grey

shell markings. In stepping out of the boat, I almost trod on a clutch of four handsome eggs of the Wilson Phalarope. I found that either myself or someone else had previously stepped on the nest, leaving a footmark, and one of the eggs broken. The nest, as usual, consisted of a small circular depression in the ground, lined with a few blades of grass, and this nest was near the water's edge. A greater scaup duck had a brood of eight young ones, swimming about one of the ponds, but we did not molest them. My companion informed me that the ponds are visited every fall by numbers of snow, Brant and other species of geese, as well as a great variety of ducks. Buffalo Lake and Long Lake, north-east of Moosejaw, are also great resorts in the fall for all manner of ducks, geese, swans, and other waterfowl. The only goose that breeds in this locality is the Canada goose, a number of which nest at Buffalo and Long Lakes. The snow goose retires to within the Arctic circle to breed, and their eggs are very scarce in collections. There are four species found in North America, the greater, lesser, Ross', and blue snow geese. The lesser snow goose is the most plentiful of the four varieties, and they are found in considerable numbers at Long Lake and Rush Lake in the fall of the year, where my companion has shot as many as thirty in one day. Sir John Richardson, in the "Fauna Boreali-Americana," says, "The eggs of the lesser snow goose are yellowish white and regularly ovate in form, and are a little larger than the eggs of the Eider duck," averaging in size 3.00x2.00. I am informed that the flesh of this bird is excellent, and far superior to the Canada goose in juciness and flavor, and the birds are favourites with sportsmen on this account. The Brant goose is also a regular winter visitor to this locality. It is almost cosmopolitan in its distribution, and found chiefly on the sea coasts of Europe and America. It is more maritime than other geese generally are, preferring the sea coast to the lakes of the interior. It is by far the most numerous of all the geese which visit the shores of the British Islands in winter. It breeds in northern Europe and Asia and on the island of

Spitzbergen, also in Greenland. The eggs of this bird are rare and difficult to procure. Two eggs in my collection were collected in Siberia, June 4th, 1887. They are creamy buff and measure 2.78x2.00, and 2.73x2.03.

I was also informed that Esquimaux curlews were exceedingly abundant about Moosejaw early in May of the present year. My companion shot quite a number of them, and said they were found in flocks of nearly a hundred. They left about the second week in May for the north, where they breed in great numbers in the Anderson river region. Mr. MacFarlane found them nesting on the Arctic coast, east of the Anderson river, late in June. The nest is a mere depression in the ground, lined with leaves and grasses. The eggs vary to the great extent usually witnessed among waders. The ground is olive drab, tending either to green, grey or brown in different instances; the markings, always large, numerous and bold, are of different depths of dark chocolate, bistre and sepia brown, with the ordinary stone grey shell spots. They always tend to aggregate at the larger end, or, at least, are more numerous in the major half of the egg; occasionally the butt end of the egg is almost completely occupied by a confluence of very dark markings. The average size is 2.00x1.45.

We rowed up the creek for two miles, collecting a number of clutches of bronzed grackles; their large, clumsy looking nests were built in the willow bushes growing along the margin of the creek. Blue-headed vireos were numerous, but we did not succeed in obtaining either skins or eggs of this species. A pair of shoveller ducks evidently had a nest as they showed signs of uneasiness as we rowed around a swampy spot, but the water was too shallow to row the boat through this swamp and the mud at the bottom was too thick and treacherous to wade through it. A large hawk flew from a nest in a tree top, up the banks of the creek, and settled in a decayed tree a short distance off. With the aid of my field glass I saw it was a ferruginous rough-legged buzzard. We left the boat and scrambled up the steep banks, and soon arrived at the foot of the tree. The nest was only about thirty feet

up, and the tree was easy to climb, so I was soon looking over the brim of the nest, where I beheld two young hawks, probably a couple of weeks old. I was disappointed to find young birds instead of eggs, and so descended the tree. My companion tried to obtain one of the old birds, which were flying around in circles, high in the air, above our heads, but they kept out of range.

This large and handsome hawk is not a rare bird in western Manitoba and Assiniboia. I saw them on several occasions flying round in circles over the bluffs, or over some wooded valley. They can be easily recognized by the whiteness of the under parts and their large size. They usually nest in trees, and the nests are made of sticks, leaves, grass and pieces of turf, and sometimes buffalo bones. The eggs are two or three, and sometimes as many as four are laid. A set of these eggs in my collection were collected north of Regina, May 15th, 1890. The eggs are whitish, blotched and spotted with different shades of brown and lavender grey; they measure 2.54x1.95, 2.50x1.97 and 2.48x2.00 respectively. Another set of two eggs in my collection, which were collected near Qu'-Appelle, Assiniboia, May 24th, 1890, are buffy white, heavily splashed with sienna brown and purplish drab shell markings. On one of the eggs the heavy markings and blotches are at the smallest end. These eggs measure 2.49x1.95 and 2.35x1.97. The eggs of this species can easily be distinguished from those of the Swainson's hawk by their larger size. The ferruginous buzzard, though a large and powerful bird, seldom attacks animals larger than a gopher, and their food consists of mice, small reptiles, birds, frogs, etc. Along the banks below the buzzard's nest, wild roses and honeysuckles were in full bloom, sending forth a delicious perfume, and there is also a bush that grows four or five feet high, its name is unknown to me, but it also has a beautiful perfume. We sat down amid these pleasant surroundings, watching the buzzards flying round in circles high in the air. The Silver Creek, winding its way for miles to the south, was dotted here and there with wild ducks, some of them surrounded by their young broods. Several

strange warblers and other small birds were singing in the dense growth of bushes which fringed the east bank of the creek, while several red-winged starlings close by were very noisy on account of our being in close proximity to their nests. We took in the charming landscape and pleasant surroundings from our elevated position, as this was my last day at Moosejaw. It was after eleven o'clock, and as we wished to be in time for dinner, we descended the steep bank of the creek, and seating ourselves in the boat, I had a steady pull for two miles back to Moosejaw.

I did not see any magpies around Moosejaw, but my companion told me they were frequently seen here; they are also plentiful in the bluffs north of Regina. I did not come across a nest of the magpie while in the North-West, but I have climbed up dozens of trees after magpie's eggs in Yorkshire, England, where the birds are common. The nests of the magpie, both in Europe and America, are built in similar situations; they are built near the tree-tops, and made of twigs, a large structure, arched over at the top, with an entrance at the side. Often have I climbed some tall pine tree, and, on reaching the nest almost exhausted, have been unable to find the side entrance, and with great difficulty and numerous scratches have had to work my hand through the side of the nest to reach the five or six eggs. The nests are so compactly and strongly built, it is no easy matter to break through the side. I once found a nest at Fewston, in Yorkshire, England, that was built in a hawthorn hedge, and although the nest was only five feet from the ground, it was impossible to get at it. The hedge was so well barricaded with thorns and prickly twigs, and appeared so formidable that I did not attempt to reach the nest, and I question whether a cat or a fox could have got at that nest without considerable trouble, and risk of having their skins badly torn with thorns and briers.

> "The thievish pie, in two-fold colours clad,
> Roofs o'er her curious nest with prickly twigs,
> And side-long forms her curious door; she dreads
> The talon'd kite, or pouncing hawk; savage
> Herself—with craft suspicion ever dwells."

A magpie's nest takes a month to build. When I was a boy, when we observed a magpie commencing to build, we never thought of climbing the tree for the eggs until a month or five weeks had elapsed after the time we had seen the birds start to build.

"The magpie," says Sir J. Richardson, "so common in Europe, is equally plentiful in the prairie-lands of America; but it is singular, that though it abounds on the shores of Sweden, and other maritime parts of the Old World, it is very rare on the Atlantic coast of America, or near Hudson's Bay; only stray individuals passing to the eastward of the Mississippi or Lake Winnipeg. It winters on the Missouri, and takes its departure northward late in March. It does not entirely quit the banks of the Saskatchewan even in winter, but is much more frequent in summer."

The magpie feeds both on animal and vegetable substances, frequently killing young ducks, partridges, pheasants, chickens, etc. In England they are destroyed by gamekeepers, on account of the damage they do amongst the game preserves. Not only do they kill young pheasants and partridge, but they also devour the eggs of these game birds. The American magpie is supposed to be a geographical variety of the European bird.

As we rowed down the creek, we came across a number of nests of the kingbird, but not one contained eggs, as they are late breeders. Muskrats were also plentiful, and as they swim on the surface of the water, they look like small beavers, some being one foot and a half in length. I did not come across Richardson's merlin while in the North-West, but one of my collectors informs me that a small falcon, probably this species, frequents the foothills of the Rockies about Morley, and I have offered him a good price if he can obtain a skin and eggs of this species for me next season. Birds have been obtained in Dakota and Montana. Dr. Richardson obtained a female at Carlton House on the Saskatchewan, while flying with her mate, and in the oviduct there were several full-sized white eggs, clouded at one end with a few bronze-col-

oured spots. Another specimen was killed at Sault St Marie between Lakes Huron and Superior.

Some ornithologists consider this species identical with the European merlin, but Professor Ridgeway has pointed out some differences before overlooked, and it may now be considered a distinct species. The only egg known is described as "buffy-white, handsomely marbled, and irregularly spotted with madder brown, size 1.52x1.22.

The European merlin, a closely-allied species, is included in the avi-fauna of North America, on account of a specimen being obtained at Cape Farewell, Greenland, in 1875. As this species is so exceedingly plentiful in Iceland, I should think it often wanders to the east coast of Greenland.

In Iceland, it nests on the ground, sometimes on rocks, where it makes a nest of a few sticks and grass, and lays four or five eggs. I have a series of 60 eggs of this species that were collected in Iceland, England and Scotland. The eggs are easily distinguished from those of the European kestril, by their smaller size, more oval shape, and darker colour. They are reddish-brown, finely spotted, freckled or mottled all over with dark brown, which almost conceals its ground colour, and gives the eggs a dark brown appearance. In the British islands, this species breeds as far south as Yorkshire, England, and its eggs have been taken on Ilkley Moor, where I have frequently seen the birds. They have a habit of frequenting a particular rock or boulder to feed on, and I have come upon them suddenly at such spots. I once flushed a merlin from a rock while it was plucking a lark; the small bird was yet warm, and all around the rock were feathers and small bones, as well as wings of insects. The rock was whitewashed by the droppings of the bird. In Yorkshire, the nests are made on the ground, and composed of heather and grass. This is a beautiful little falcon, and very bold and active.



CHAPTER XVI.

AFTER dinner I started out alone for a slough north of Moosejaw. I ascended the ridge and was soon among the lonely rolling prairies. Buffalo birds were numerous, going about in troops of several dozen, and the next most common bird was McCown's longspur. The song of this bird is very cheering, and the male always sings as he descends to the ground with outstretched, motionless wings. I had not gone far before I flushed a female from her nest and four eggs; the nest, as usual, was concealed under the shelter of a tuft of grass. This set is remarkable in having all the marking at the larger end of the egg where they form a zone.

The next find was a set of four eggs of Bartram's sandpiper; the bird sat on her eggs until I was close upon her, when she got up and ran along in front for a few yards. The nest was like all others I have seen, a mere hollow in the ground lined with a few blades of dry grass. Bartram's sandpipers are exceedingly abundant on the prairies, and their eggs are often gathered for food in the same manner as lapwing plovers eggs are in England.

On reaching the summit of a ridge of the prairie I beheld the slough below me. Several kildeers soon discovered me and gave the alarm with their plaintive cries. They came flying towards me, and I soon had a number flying above my head. They are a great nuisance, as they warn the other birds, who slink away from their nests and hide among the rushes. I saw a pair of yellowshanks, and while searching for their nest I came across the nest of the curlew and four eggs. The nest was some distance from the margin of the slough, and consisted of a mere depression in the ground lined with grass, like other plovers. The eggs are an olive-greenish

shade, spotted with brown. The curlew can easily be recognized by its long, curved bill, which measures eight or nine inches in length.

While I sat down blowing these eggs, a prairie wolf came along around the margin of the slough, and he evidently did not notice me until he got within fifty feet, when I halloed, and this caused him to run back. He ran up a slope and then came to a standstill and looked back at me, and then turning round disappeared behind the ridge. Prairie wolves, like foxes, are fond of ducks which they capture about the sloughs and lakes, and I frequently saw wolves around the margins of the lakes where they also come to drink. There were a number of coots, shovellers, mallards, scaup, widgeons, and blue-winged teals swimming about the slough, and most of them had young ones which they led away to the other side of the water. A large brown bird flew up out of a cluster of rushes, which gave me quite a start as I brushed passed it, and peeping through the rushes my eyes gazed on a nest and four beautiful eggs of the American bittern. The nest was rather large, and made of sedges. It stood about a foot high, and the bottom of the nest rested in the water. The top of the nest had a cavity the size of a saucer, and the eggs are brownish-drab with a greyish shade, something after the style of colouring of the English pheasant's egg. They average in size 2.00x1.50. American bitterns are plentiful among the bogs and marshes of the North-West, and I frequently heard them towards dusk during my stay at Long Lake in Manitoba. They are also found on the island opposite Toronto, Lake Ontario, where I have flushed them on several occasions. They generally begin to boom towards dusk; they make a peculiar noise which sounds like a mallet striking a stake: something like the syllables, *chunk-a-lunk-chunk, quank, chunk-a-lunk-chunk.* The bittern is a wild, shy, solitary bird, and more often heard than seen, as it haunts impenetrable bogs, where it finds plenty to eat, and after feeding it stands motionless for hours, half dazed. When surprised, it springs into the air with a croak, and flies off with its legs dangling down behind and its neck out-



AMERICAN BITTERN & NEST.

stretched in front. It flaps heavily, and is very easily shot on the wing. When only wounded or winged it fights well, using its strong beak, inflicting no slight wound on an uncautious hand. The food of this bird consists of small aquatic animals, such as crawfish, frogs, lizards, snakes, fishes, as well as insects. I have a clutch of three eggs of the American bittern that were collected in a bog near Stratford, Ontario, June 9th, 1890; another clutch of three eggs taken May 19th, 1889, at Otter Lake, N.Y., and a clutch of four eggs taken May 24th, 1886, in Orleans Co., N.Y., so that three or four appear to be the usual number of eggs laid by this bird. My next find was a set of four spotted sandpiper's eggs, found by flushing the bird off its nest. This clutch was handsomely spotted and blotched with blackish brown, chiefly around the butt end of the egg, where the heavy blotches almost formed a zone. I walked around the slough and saw hundreds of yellow-headed blackbirds, but could not find their nests. Black terns were were also very numerous, but they had not yet commenced to lay.

A Wilson's phalarope fluttered from in front of my feet, and I found its nest and four eggs well concealed in the centre of a tussock of coarse marsh grass. Soon afterwards I came across another clutch of four eggs, also found by flushing the bird. The nests are well hidden, cup-shaped, and generally made in the centre of the tussocks of grass that grow around the sloughs. They are usually found high up on the dry ground, many yards away from the water's edge. When the birds are flushed they stumble along in front of one's feet, fluttering as if winged or wounded, and making a squeaking kind of a noise. It is the male bird that is always startled off the nest. I never yet surprised a female on the nest, but when the male bird is flushed, he goes away and soon after returns with the female, who has been feeding along the water's edge, not far off, and both birds then begin to fly around the head of the intruder. The male bird alone attends to the duties of incubation, which is rather singular. After blowing and packing the eggs, I sat down and rested awhile,

watching the various movements of the ducks, coots and other waterfowl. There is always a great noise about the sloughs, which swarm with bird life; what with the quacking of the ducks, and the screams of coots and rails, the cries of the killdeer, godwits and curlews; the whistle of the field plover, and chatter of the blackbirds, there is always plenty to interest the ornithologist. After watching the birds for some time, I got up and turned homewards. I went a different way back to Moosejaw, and came across a deep gorge, down the bottom of which a clear stream trickled, where I quenched my thirst. I passed a camp of Indians, who eyed me, and called out, but I could not understand them. Three bucks came towards me, and I began to think they meant mischief, so I cautiously took my revolver out of my hip pocket, so that they would not notice my action, and put it in my side pocket, with my hand resting on it, in readiness, should they lay hands on me, when I intended to do the best for myself. The Indians, however, contented themselves with passing remarks about me, and as I could not understand them, their remarks, if uncomplimentary, did not hurt my feelings, and so I passed on.

As a rule, the Indians are friendly and do not molest travellers. The North-West mounted police have them under their control. The Indians have been made to feel the majesty and blessings of law since the North-West rebellion was settled. Three or four of the mounted police have been known to ride into a camp of hundreds of armed savages and arrest on the spot, and carry off for trial, an armed swaggerer accused of murder—a signal proof of the supremacy of law—as Indians regard a member of their band as a brother, whose case they are bound, by ties of blood and sentiment, to make their own. Whiskey traders, who formerly built forts and lived at license where they listed, have had their stores confiscated and themselves driven across the boundary line, in a state of intense disgust at the police force and British institutions generally. No exercise of authority has been more appreciated by the Indians, for they hate whiskey traders as much as they love



INDIANS AND THEIR TEPEES.

whiskey. Though the force is scattered over the country at Carlton, Battleford, Edmonton, Forts Pelly, McLeod, Regina, Maple Creek, and other points hundreds of miles distant from each other, the smallest detachment has always proved large enough for any duty with which it has been entrusted—an evidence of moral power that could have been acquired only by a long course of just and considerate dealing. The Indian policy of the Canadian Government is sometimes declared to be a failure, and at other times is mildly censured as expensive. Though by no means perfect, it may challenge comparison with that of the United States, or of any other civilized nation towards a weaker race. Judged by its fruits—the maintenance of order without shedding blood, and the steady growth of a conviction among the Indians that the Government means fairly by them—it may even be pronounced a success.

The camps of the Indians are scattered all over the North-west; they are generally situated beside a lake stocked with fish, or near wooded valleys, the bushes of which are laden with the Indian pear, or rich Saskatoon berries. A peculiar rite of the Indians inhabiting these parts is the "Dog Feast." This feast is celebrated once a year at the principal points at which the Indians congregate in summer, either for the purpose of fishing or receiving their annuities, or treaty-money. In the midst of the proceedings which are conducted with the utmost gravity by the principal medicine-man of the band, a dog is slain, cut up, cooked and eaten. Although called the Feast of the White Dog, and this colour is preferred, a dog of any other colour will answer the purpose. The ceremony appears to have some analogy to the Hebrew passover, but its origin and meaning are lost in obscurity, as is the case with most of the religious observances of the Indians.

The extermination of the buffalo has been a serious loss to the Indians, and they have now to content themselves with the flesh of the deer, antelope, hares, ducks and geese, not bad fare either, and they are experts with both rod and gun. Ten years ago there were a few small herds of buffaloes still exist-

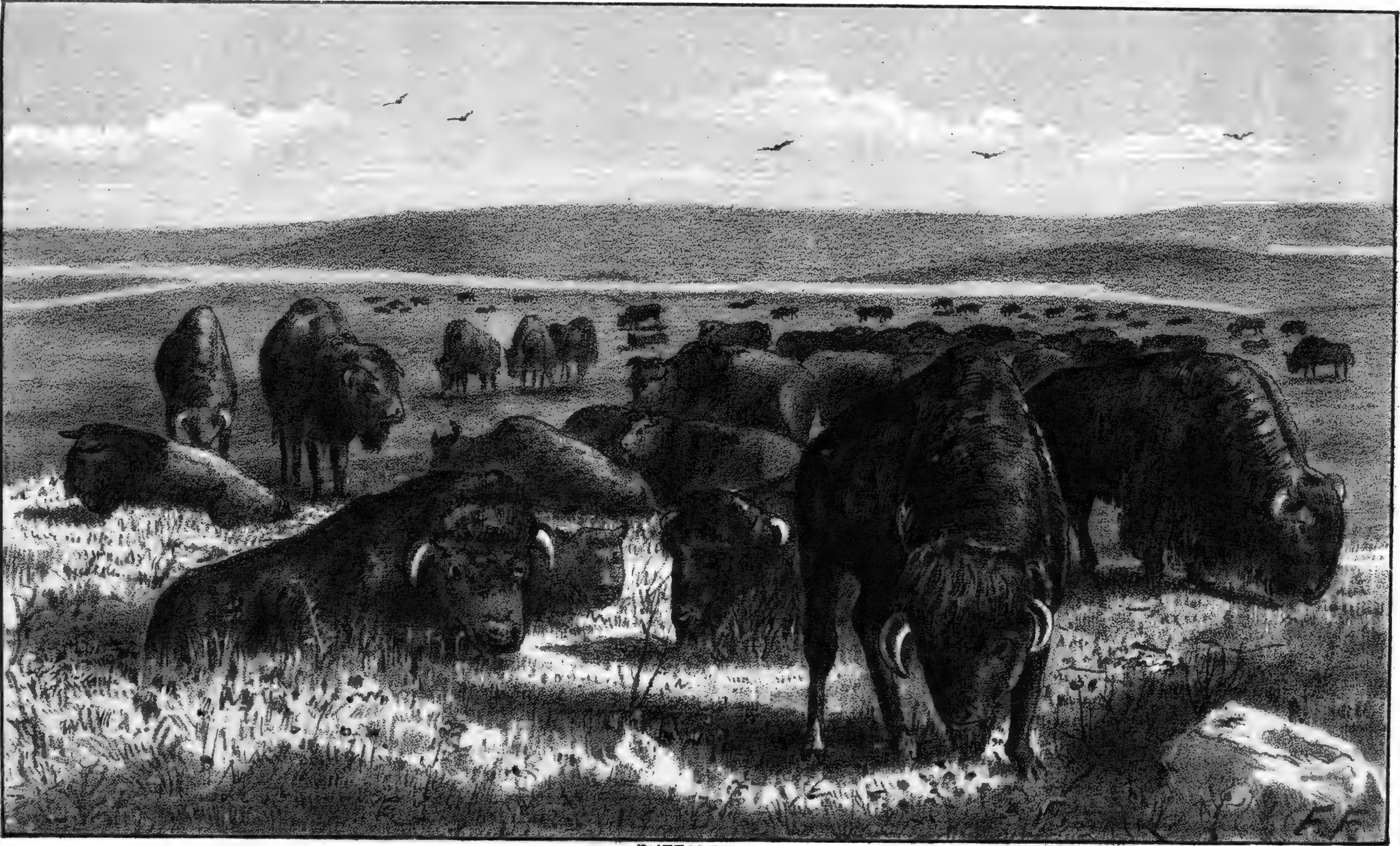
ing in the North-West. I saw a calf at Quebec in 1886 that was captured by the soldiers in the Saskatchewan region during the rebillion. I have talked with old settlers and hunters who remember seeing buffaloes in herds of hundreds together. In Catlin's time it was estimated that 300,000 Indians were subsisting on the flesh of the buffaloes, and by these animals were supplied with all the luxuries of life. The flesh of the bison, in good condition, is said to be very juicy and well-flavoured, much resembling that of well-fed beef, others describe it as bearing the same relation to common beef that venison bears to mutton. The tongue when well cured is said to surpass that of the common ox as a relish, and all travellers concur in praising the hump as rich, savoury, tender and delicious. Buffalo robes are numerous in Toronto and other Canadian cities, scores may be seen in the streets any winter's day, hung behind the sleighs of wealthy citizens. The present market value of a buffalo robe varies from $35 to $50.

Formerly buffaloes roamed over the prairies of the North-West in vast herds. According to Lewis and Clark, "such was their multitude as they crossed the water, that although the river, including an island over which they passed, was a mile in length, the herd stretched, as thick at they could swim, completely from the one side to the other." On another occasion, they say, "If it be not impossible to calculate the moving multitude which darkened the whole prairies, we are convinced that 20,000 would be no exaggerated number." Dr. James states, that in the middle of the day countless thousands were seen coming in from every quarter to the stagnant pools to wallow, and at the present day, in some parts of the North-West, the buffalo trails are as plentiful and almost as conspicuous as the roads in the most populous parts of England or the United States. According to Sir John Richardson, the bisons were less wary when they were assembled together in numbers, and they would often blindly follow their leaders, regardless of, or trampling down, the hunters posted in their way. Years ago, when the early settlers had to cross over the prairies in waggons, it occasionally happened that they were run down and trampled to death by a herd of buffaloes.

An old settler relates the following which occurred nearly forty years ago when he was a young man:

While crossing the prairie on horse-back, he overtook a couple of emigrants and their families and waggons. The day had been terribly hot, and towards evening the atmosphere became very sultry and oppressive, the sky was dark and a thunderstorm approaching. Water had been very scarce all day, but at last they came to a stream which had not yet dried up; here they quenched their own thirst and that of their horses. As the storm approached nearer, streaks of vivid lightning lit up the prairie, so they decided to camp near the stream for the night. Their supper over, they began to prepare the best shelter they could to shield them from the coming storm. Suddenly their horses became very restless and began to neigh, which caused the men to look around them for the cause thereof, when to their dismay they beheld toward the horizon, a great black mass moving towards them. The emigrants newly arrived from the east did not realize the danger they were in, but the horseman, who had lived on the prairie some years, knew that if the herd came that way, a catastrophe might follow. Hurriedly the waggons were drawn close together, the horses tied to the wheels, and the women and children got into the waggons and crouched at the bottom with fear. The men and boys got their guns and climbed in front of the waggons in hopes of being able to frighten the animals off on their approach. The horsman mounted his steed and looking towards the seething mass of buffaloes, he took in the situation at a glance. On they came in thousands, causing clouds of dust to rise in their maddened career. The men turned pale and the poor women and children began to tremble and cry out with fear. The sight was fearfully grand, and the old settler said he remembered it as well as if it had only happened yesterday. On and on they came until the leaders of the buffaloes were only a few hundred yards away. He saw there was no hope for the little band of settlers, and it was now time for him to try and save his own life, so he called out to the men, "I cannot help you. God bless you all," and with that he galloped off

at full speed, and turning in his saddle he saw the foremost leaders of the buffaloes had passed the waggons, and the mass of animals were close upon the little band of human beings. A few seconds later he heard the guns fired, a feeble shout, a crash, and screams from the women. The waggons had collapsed, and over a dozen poor souls were being trampled into eternity. He rode furiously away from the animals; it was a ride for life, and more than once his horse stumbled, but recovered itself. After half an hour's hard gallop he found he had gained on the herd of buffaloes, and noticed the leaders were heading for the west, so he rode eastward where he saw in the distance a bluff in which he hoped to secure protection. Slackening his horse's pace, he turned round and saw the buffaloes were two miles west of him; he now breathed freely knowing he had escaped being run down and trampled to death; coming to a halt he watched the multitude pass before him in the distance, and he estimated there must have been upwards of ten thousand buffaloes. After the herd had passed, they were in sight for nearly an hour afterwards, and at last disappeared in the distance. It was now nearly dark, so he decided to spend the night in the bluff, so he tied his horse to a tree and laid himself down at the foot of a tree, but he could not sleep. At day break he got up, and at noon he reached his destination, where he reported the disaster and his narrow escape. The following day he led a party to the scene of the disaster, where they found a number of vultures on the spot, and all that remained as evidence of this sad event were a few pieces of iron, wood and bones, scattered for nearly a mile over the prairie. The ground was ploughed by the thousands of feet that had passed over it, showing a track across the prairie over half a mile in width. These mad rushes of the herds of buffaloes are caused by thirst. Fortunately at the present day the ornithologist can ramble over the vast prairie at his own sweet will, without fear of being run down by a herd of mad buffaloes. However, it is to be regretted that these animals, once so plentiful, are now almost extinct, and it was a sad sight to see the skulls and bones of these animals scattered all over the prairie, and in some places



BUFFALOES.

they were so thick that it was evident that a great slaughter of bison had taken place on the spot—not many years ago either. The horns are now being collected by the Indians and polished and sold to passengers at the stations of Moosejaw and other places. At some of the stations great piles of skulls and buffalo bones may be seen along the railway sidings; the bones are collected and sent eastward, where they are used in sugar-refining.

But to resume our journey. After passing the camp of Indians, I walked along the bottom of the gorge for over a mile; the banks were very steep, and in some places small trees and bushes were growing out of the side of the cliffs. Turning around a bend of the gorge, I startled a prairie falcon out of a cliff on the opposite side: it flew off screaming, so I concluded it had a nest, and I thought I saw a dark object in a bush near the cliff top, so I jumped the stream, and was eager to get up at the nest, for on reaching the foot of the cliff I saw there was a nest of sticks. I found the place easy of access, and pulled myself up by the aid of the branches of small trees and bushes. In five minutes I was at the nest and looking over the edge, when I found it contained nothing, much to my disappointment, for on account of flushing the bird from the nest, and the bird flying off with a scream, I felt sure it would contain eggs, but the oologist is frequently disappointed in this way.

The nest was a large structure of sticks, and partly rested on the cliff and also on the bush growing out of the cliff; the top of the nest had a cavity, and this was lined with grass, and appeared quite ready to receive the eggs. The eggs of the prairie falcon are handsome, and are not unlike some varieties of the peregrine falcon. I have two clutches before me; one set of four eggs were collected on Moose Mountain, Assiniboia, May 20th, 1889. The ground colour is reddish buff, and they are clouded, chiefly about the largest end, with light chestnut brown; two of the eggs have blotches and spots of deeper brown, which congregate chiefly about the butt end of the eggs. They measure about 2 inches by 1½. The nest from which

these eggs were taken was built on the ledge of a cliff, and was made of sticks, and lined with grass and feathers. Another clutch of three eggs were taken in Montana, June 2nd, 1887. One of the eggs has a creamy buff ground, and the ground colour of the other two is a light red, and they are clouded and spotted with brown of various shades. Like eggs of the Iceland gyr falcon, the eggs in a clutch vary as much one from another as to appear to have not been laid by the same bird. I saw several prairie falcons at Rush Lake. They possess great strength and daring, and are said to attack and overpower the hares of the west, animals larger and heavier than themselves.

The gyr falcon is frequently seen in winter in Manitoba, and I saw a fine specimen in Winnipeg that was shot last November. They breed around the coast of Hudson's Bay, and also in the interior regions of Arctic America, and around Great Slave Lake. Sir John Richardson states that this species is a constant resident in the Hudson's Bay Territories, and mentions the following incident:—

"In the middle of June, a pair of these birds attacked me as I was climbing to their nest, which was built on a lofty precipice on the borders of Point Lake, in latitude 65½°. They flew in circles, uttering loud and harsh screams, and alternately swooping with such velocity that their motion through the air produced a loud, rushing noise; they struck their claws within an inch or two of my head. I endeavored, by keeping the barrel of my gun close to my cheek, and suddenly elevating its muzzle when they were in the act of striking, to ascertain whether they had the power of instantaneously changing the direction of their rapid course, and found that they invariably rose above the obstacle with the quickness of thought, showing equal acuteness of vision and power of motion. Although their flight was much more rapid, they bore considerable resemblance to the snowy owl."

This species breeds in Norway, Sweden and Lapland, as well as in Arctic America. I have three clutches that were taken in Lapland. The nests are placed in cliffs and made of sticks, grass and feathers of sea birds. They lay from two to

four eggs early in May. One clutch of three eggs taken near Tornea, Lapland, May 4th, 1889, are very handsome. The ground colour is light red, mottled and clouded over with reddish brown. They measure 2.25x1.75, 2.22x1.75 and 2.20x1.72. There are three species of gyr falcon that are found both in Europe and America: The white or Greenland gyr falcon, the gray or Iceland gyr falcon, and the gyr falcon. There has always been some confusion about the gyr falcons on account of their different stages of plumage, but the foregoing three species are now well-established.

The Iceland gyr falcon is a handsome bird and lays handsome eggs, as I can testify by a fine series of thirty-six eggs now before me, which is probably the largest series ever brought together; all these eggs are from Iceland, where the birds breed among the crags of the sea-coast. The late W. C. Flint, of San Francisco, an enthusiastic oologist, had also a nice series of sets of the Iceland falcon, which I obtained for him. The series on the table before me were selected from close upon fifty specimens that have been collected in Iceland this last six years. The eggs of this bird are the most beautiful of all the falcons, and it is needless to say I am proud of my series. The number of eggs laid by this species is usually three or four; I have four clutches of four eggs, six clutches of three eggs, and one clutch of two eggs. The eggs vary greatly even from the same nest, and are not unlike peregrine falcon's eggs in style of colouring, but, of course, are twice as large. In some specimens the ground colour is cinnamon or buff, distinctly spotted and blotched with deeper cinnamon brown; in others the pale ground colour is almost concealed with speckles of reddish-brown all over the eggs; then, again, some are an uniform cinnamon or brick-red colour without any spots whatever, and the darker specimens have the ground colour, reddish-brown, speckled, mottled and clouded over with rich reddish-brown, and these dark varieties resemble some specimens of the Egyptian vulture and Caracara eagle. Mr. Ridgway, in his manual of North-American birds, gives the size of the eggs of the gray gyr falcon as 3.37x1.72; this is

wrong, and may be a misprint, and probably should be 2.37x1.72; otherwise, he must have had the egg of some other species when he took the measurements, as I never saw an egg of the gray gyr falcon so long and narrow, and I have handled close upon fifty specimens these past five years. Four of the largest of thirty-six eggs before me measure 2.52-x1.89, 2.50x1.87, 2.39x1.88, and 2.37x1.87, two of the smallest measuring 2.25x1.80 and 2.25x1.78. In Iceland, the eggs are laid from the middle of April to the middle of May. Bred among the crags of the polar rocks, this fine bird is well prepared for the fitful and furious blasts which occasionally rage in countries near the ice, and though its neighboring prey might seem to be scanty, yet for this it is amply compensated, as it surpasses all the falcons in its command of the air. Though the distance from Iceland to those parts of Scotland and the isles where it is seen, is about five hundred miles, this is said to be merely a morning's journey for this falcon, from which it can easily return the same evening. When in mature plumage, it is white, with bars and barb-shaped dashes of brown, which become less and less with age, though they are seldom or never lost. In Iceland this gyr falcon makes its nest among the crags of the sea coast, and returns year after year to the same nest. Sometimes it takes possession of an old nest of the raven, as the peregrine falcon does in the north of England and Scotland. I remember seeing a clutch of raven's eggs that were taken from a nest in a cliff at Sedberg, in Yorkshire, England, and also a clutch of eggs of the peregrine falcon, that were taken a month later from the same raven's nest.

The raven breeds around the shores of Lakes Winnipeg and Manitoba, around Hudson's Bay, and at Thunder Cape, Lake Superior. The nests are usually built in the cliffs, and difficult to get at. Should any of my readers ever come across a nest of the raven, peregrine or golden eagle, built in a cliff, they should never attempt to descend to the nest by the aid of ropes, without the assistance of others, or they might meet the sad fate of poor John Cahoon, who lost his life last April

through trying to collect a clutch of raven's eggs, on the Newfoundland coast. The following account of his horrible fate is taken from the "Ornithologist and Oologist."

"HALIFAX, N.S., April 27th, 1891.—The body of John C. Cahoon, of Taunton, Mass., the young American naturalist, arrived on the *Nova Scotian* to-day from St. Johns. He was killed at Shag Roost while hanging over a cliff gathering eggs from a raven's nest. He was rowed to the spot in a dory by two boys, landed with a rifle and rope, and by means of a détour gained the summit of the cliff, 200 feet above the sea. The boys in the boat saw him take off his coat, watch and boots and descend by the rope to the shelf of the rock upon which the nest was built. He quickly secured five eggs and held them up for the boys to see, put them in his pocket and commenced to make the ascent. The cliff was an overhanging one, and as he went up his body swayed considerably. At the top the rope bore upon the cliff, and it would appear as if he was unable to get his fingers between the rope and the rock to acquire a hold. He struggled hard for twenty minutes, but could make no headway. The rope, though knotted and looped, gave him no support, and he began to slip downward. He appeared to fold the rope in his arms, as if the palms of his hands were being burned by the friction. His descent became more rapid, and he could not land on the shelf from which he had taken the eggs. Faster and faster the poor fellow slid downward till the end of the rope, which swayed loosely above the sea, was reached. His legs struck against the cliff; the rope jerked outward from the contact, and the unfortunate young man fell backward into eternity. His body bounded from the rocks and fell into the sea. The water in the locality was red from blood. The body was recovered next day. Such was the sad end of young Cahoon."

The raven breeds around the coast of Newfoundland, New Brunswick, Nova Scotia, and in the gulf of St. Lawrence, as well as inland around the shores of the larger lakes, as already stated. The raven is almost cosmopolitan. I have eggs from India, Spain, British Islands, Iceland, and other northern

regions. In Iceland the raven lives to an old age, and returns for many successive years to the same cliff to breed. The Iceland birds are large and powerful, and the eggs average larger than those from the British Islands and other countries further south. The number of eggs is four or five, and they vary as much as the eggs of the common crow do. In a series of forty eggs before me, four average specimens measure 2.15x1.32, 2.10x1.40, 2.08x1.39, and 2.05x1.37. These eggs are from Iceland, and the eggs from this country are always larger than those collected in North America. A clutch of four eggs of the raven, taken in South Spain, March 22nd, 1890, only average in size 1.85x1.27, and this is the average size of the eggs collected in the British Islands and in North America. The colour of the raven's eggs varies from light bluish green to olive green. They are spotted, blotched, and streaked with purple and greenish brown, some specimens being so densely marked as to almost conceal the ground colour.

Ravens abound in the fur countries, and visit the remotest islands of the polar seas. They frequent the barren grounds, even in the most intense winter colds, their movements being chiefly directed by those of the herds of reindeer, musk oxen and bison, which they follow, ready to assist in devouring such as are killed by beasts of prey or by accident. No sooner has a hunter slaughtered an animal than they are seen coming from various quarters to feast on the offal; considerable numbers constantly attend the fishing stations, where they show equal boldness and rapacity. The experienced Indian, when he sees from afar a flock of ravens wheeling in small circles, knows that a party of his countrymen, well provided with venison, are encamped on the spot, or that a band of wolves is preying on the carcase of some of the larger quadrupeds. Ravens sometimes attack living animals, and are destructive to lambs, for they pick out their eyes. They are fond of shell fish, and break them by dropping them on the rocks while circling above. When they are paired, they live together for the whole period of their lives. In North America and the British islands they nest in March, but in Iceland and Greenland they seldom have eggs before May.

But to resume my ramble. Leaving the nest of the prairie falcon, I did not again descend into the gorge, but crossed over the prairie to Moosejaw, and called upon my friend, who had spent the morning with me up the river at Moosejaw. I directed him to the cliff where the prairie falcon's nest was, and he promised to visit it a week later for the eggs, but he failed to keep his promise, although I offered to pay him a good price if he obtained the clutch for me.

After supper, I went for a ramble along the banks of the river in front of Moosejaw. I crossed the bridge at the same time as a troop of Indians were passing over, with their numerous ponies and dogs. It was a picturesque scene, and I wished they could have been photographed. The troop consisted only of women and children; they had no men with them. The squaws do all the work, carry the loads, go in advance, and erect the tepees, and the bucks follow and come into camp when the work is done. Their carts have no wheels; they consist of two long poles, in the centre of which is a sort of platform or box, in which are seated the old squaws, papooses, etc.; one end of the two poles forms the shafts, which are fastened to the pony with pieces of hide; the other ends of the poles rest and trail along the ground. The boys and girls were dressed in blankets of bright colours. The Indians, like the buffaloes, are fast disappearing before the onward march of the white man and civilization. Treat the Indians kindly, for they are the children of the old lords of the soil.

After wandering along the banks of the river for an hour until dusk, I returned to the station house, and, packing my specimens and baggage, I waited the approach of the train from the west, which was due at ten o'clock. Presently the train came along, and as I was tired I soon retired to my berth, instructing the guard to wake me up in time to get off at Virden the following morning.

CHAPTER XVII.

DURING the night we passed the celebrated Bell farm, embracing 100 square miles. At Indian Head, near the centre of the farm, the headquarters buildings may be seen on the right. This is a veritable manufactory of wheat, where the work is done with an almost military organization, ploughing by brigades and reaping by divisions. Think of a farm where the furrows are ordinarily four miles long, and of a country where such a thing is possible—to plough one furrow outward and another returning is a half day's work for a man and a team. There are neat stone cottages and ample barns for miles around, and the collection of buildings about the headquarters make a respectable village.

In other parts the fat lands of the North-West are being rapidly taken up, and the rush of immigration to Canada promises to be greater than ever this year, and those coming are of the right class, agriculturists with a capital of from $500 to $1,000 to begin upon.

Ontario is also becoming alarmed at the number of farmers who are leaving this spring for the North-West. Ontario cannot afford to allow Manitoba to be populated at her expense, although it is a fact that agriculturists can do much better in the North-West than in Ontario. Here is a picture of what is repeating itself every day: A group of families start from the older provinces in early spring, because, though they may have to suffer peculiar hardships at that season, they are anxious to put up their buildings and gather a partial crop from the upturned sod before the first winter comes.

The farms consist, at the outset, of the vast stretch of untilled land that has waited long for the plough; the farm house is the emigrant's wagon or "prairie schooner," the stable the sky, and their bed a waterproof or rug on the prairie.



EMIGRANT TRAIN, ASSINIBOINE VALLEY.

In a week the first house is up. Neighbour helps neighbour. In two or three weeks several log houses spring up, dotting the hitherto lonely expanse with centres of life and interest. The settlers now have their shelters; complacently they look on their new neat log cabins, which usually consist of one large room, with a ladder in the middle that leads to the loft or upper story where rude quarters for the night are found. A dark strip on the green prairie that bespeaks the presence of the plough is the next step in advance; then a piece of fencing, or one or two stables or other outhouses, and cattle gather round the steading. June comes, and the plough is in full swing; "Gee" and "haw" are heard for miles around. Black strips of ploughed land, becoming larger every day, are noticeable. Where the prairie has been broken near the houses the chances are that the dark-green of the potato vine is seen coming up, and farther off a piece of oats or barley looking strong and healthy. Perhaps a row of trees is planted along the road in front of the houses; and now visit the settlement in September, the most delightful time of the year for prairie travelling, and ask the settlers how they like the new country; the answer will be in ninety-nine cases out of a hundred, either "first-class," or "you couldn't pay me to return to Ontario." With pride they point out the progress that has been made in a few months, and contrast it with what would have been accomplished in the same time on a bush farm in any of the older provinces. Next year a fine field of wheat is pretty sure to stretch away from the front door, and the milk house is furnished with rows of bright pans filled with creamy milk. The North-West bids fair to be the future granary of the world. It is scarcely possible to estimate its illimitable possibilities. This vast region is the true habitat of the wheat plant. The yield is astonishing, not only because of the richness of the soil, but because here the plant attains its full development. Some of the best wheat is grown at Prince Albert, five hundred miles north-west from Winnipeg, and at Fort Vermillion on Peace river, six or seven hundred miles still further away to the north-west. Wheat from Peace river,

seven hundred miles due north of the United States boundary line, "took the bronze medal at the Centennial in Philadelphia in 1876."

The Peace river country is so far to the north that it is difficult to think of it as suited to the growth of cereals; but it is still more difficult to reject the testimonies of its fitness, and the vastness of its undeveloped wealth.

"A Canoe Voyage from Hudson's Bay to the Pacific," by the late Sir George Simpson, edited with notes by Malcolm McLeod, is very full of facts, taken from the journals of responsible officials, all showing that "behind the north wind," or beyond the North-West of which we have been speaking, extends a new region, equally vast and promising, wheat and pasture-lands, well timbered, well watered, and abounding in coal, bitumen and salt. The country swarms with caribou, musk ox, deer, wild fowl, and small game. Prof. Macown declares that this is the richest region of Canada. The mean temperature of the seven months from April to October at Dunvegan is higher than at Halifax, Nova Scotia, almost a thousand miles nearer the equator. Already the advance guard of an invading host, armed with ploughshares, and accompanied by wives and children, and domestic cattle, have reached Edmonton. Very soon their horses and herds will cross the Athabasca, and crop the rich herbage that covers the banks of the Smoky and Peace rivers.

While the Hudson's Bay Company held sway over the North-West, it was the fashion to represent the country as utterly and hopelessly hyperborean. Echoes of the stories told in those days, of the ground remaining frozen all summer, still float in the air, and make men unable to believe, in spite of all that has been recently written, that it can be anything better than an arctic region. Calumnies die hard. The emigrant will find difficulties in every country to which he goes. The climate is not very different from that of Eastern Canada, and is even more healthy. The winter is colder, but on account of the dryness of the air, the cold is not so much felt. The summer is warmer, but the evenings are cool. April and May are

usually dry; June is the rainy season; July and August the hot months, and during these the growth of all plants is marvellously vigorous and quick. The autumn is cool, dry and invigorating, the very weather for harvesting. The rivers and lakes freeze in November, and open for navigation in April, December is clear and cold, but little snow. January and February are the coldest months, and storms may be looked for occasionally. March is sunny and broken by thaws. During the greater part of winter, the air is remarkably still. The thermometer may sink to 50 degrees below zero, but people properly clad experience no inconvenience, and teaming, logging, and rock-cutting go on to as great an extent as in the eastern provinces.

A few difficulties may be mentioned, such as local hailstorms in August and September, which damage the crops sometimes; terrific thunder and lightning, mosquitoes, especially near swamps, grasshoppers from the great American desert, occasional summer-frosts, and alkali, or an impure sulphate of sodium in the soil, over large tracts of country, particularly in the heavier clay lands, must also be taken into account, but these have been magnified. As to the last, farmers now consider a little alkali in the soil beneficial. It brings cereals to maturity earlier, and tends to stiffen and shorten the straw, thus enabling it to stand the high winds. The chief difficulty is to keep it out of the wells. In a word, emigrants with small means need not expect to become wealthy suddenly. They can, with frugality and industry, attain to independence in Manitoba in a shorter time than in Eastern Canada. Then, as to the Indians, they are gradually disappearing before the stronger races. Bred and reared in poverty and dirt, and having generally the taint of hereditary disease, they are, as a rule, short-lived. The Government has appointed instructors well supplied with implements, seed and cattle, to teach them farming by precept and example, but the poor creatures do not take kindly to steady work. They are seen at their best when they assemble at the appointed rendezvous to receive their treaty money; faces daubed with bright paint, and the Union Jack

carried in front of the crowd. After the payments are made, they have a dance, and then a dog feast, washed down with as much fire-water as unscrupulous whiskey-dealers can smuggle to them.



FEAST OF THE WHITE DOG.

CHAPTER XVIII.


JUNE 16th.—Arrived at Virden, at 8 o'clock in the morning, and put up at the hotel near the station. As I was tired with travelling all night, I went and had a sleep until dinner time. Dinner over, I set out for a tramp to the south of Virden. Virden is the market town of a particularly attractive district, but for forty miles west of this place is a stretch of virgin prairie held by speculators, and the few farms near the railway are scattered far and wide. There are numerous ponds, sloughs and bluffs in this section, affording excellent opportunities for sport, wild ducks and prairie chickens being exceedingly abundant. I came across a prairie stream, the banks of which were fringed with small oaks, ash-leaved maple and poplar. Of these, the poplar or trembling aspen is the characteristic tree of the North-West. As the traveller goes west, he sees hardly any other for hundreds of miles. To the south-west of Virden stretches the level prairie, dotted here and there with islets of aspens.

I wandered along the sides of the stream, and soon found the trees along its banks afforded shelter to numerous species of small birds.

I soon found a number of nests of bronzed grackle, red-winged starling and kingbird; the two former species had eggs, but the kingbirds had not yet commenced to lay.

Birds' nests began to be so numerous that it appeared as if all the small birds for miles around had come and made their nests in the trees and bushes along this stream. The reason is, that suitable nesting-places for the small woodland birds are few and far between on the prairies, and that accounts for so many nests being found in these isolated bluffs and strips of trees along the banks of the streams. About every bush contained a bird's nest, and there must have been scores of nests

of the bronzed grackle, red-winged starling, cat bird and American robin. I only took two or three of the finest clutches, but I suppose if I had cared to, I could have soon filled my hat full of these common eggs. What a different task it is collecting specimens in the east, where one may tramp through the woods and fields all day and find less than a dozen nests, while here on the prairies, and in the bluffs, it is an easy matter to examine over a hundred nests a day. The oologist can here have his wishes gratified to the fullest extent. The first find of importance was a nest and three eggs of the black-billed cuckoo. The nest was made externally of twigs, lined with fine roots and grass, and built in a bush. The eggs can easily be distinguished from those of the yellow-billed cuckoo by their smaller size, and darker glaucous green colour. I did not come across the yellow-billed cuckoo in the North-West; it is a more southern species than the black-billed. I only know of one instance of its eggs being taken near Toronto, Canada, where the black-billed cuckoo is a common summer resident. The nests of both birds are like miniature crow's nests, forming a flattish structure, and are generally saddled on the horizontal branch of a tree, or built in the centre of some prickly bush, like the nest of the great grey shrike.

The voice of the American cuckoo is not like that of the European species. The European cuckoo has a sweet mellow voice, and articulates the word cuckoo very distinctly, but the voice of the American cuckoo is more of a hoot, and sounds like the syllables koo-koo-koo. The burrowing owl makes just such a similar noise. The American cuckoos are known in some districts as rain crows, because their notes are uttered more frequently during the atmospheric changes preceding falling weather. Although not parasites, like the European species, devoid of parental instinct, they have their bad habits, being even worse enemies to the small, gentle birds, for they are great thieves, and as wicked as jays and magpies, continually robbing birds of their eggs, and even, it is said, devouring the helpless nestlings. The yellow and black-billed cuckoos

are rather shy birds, inhabiting woods and thickets, courting the seclusion of the thickest foliage. The black-billed cuckoo has been obtained in Ireland, and the yellow-billed species has been shot on several occasions in England.

My next find was a nest and five eggs of the great grey shrike. The nest was a large, bulky structure of twigs, the inside made of roots and weeds. The eggs are like those of the white-rumped shrike, with the exception of being a trifle larger; they are greenish grey, spotted and blotched with obscure purple and light brown. The great northern shrike breeds plentifully around Crescent Lake, Assiniboia. From here I received a number of clutches last season. On comparing a large series of eggs of the great northern shrike with those of the white-rumped shrike, it is at once seen they are larger in size, and the eggs of both species vary considerably in colour and markings. The white-rumped shrike is common throughout Manitoba, where both species are known as the meat birds, on account of their habit of impaling small birds and insects on thorns and sharp twigs. They are cruel, quarrelsome and rapacious, and are destructive to the smaller birds, many of which they kill, simply eating out the brains and leaving the bodies impaled on a twig to dry in the sun. From this habit they are called butcher birds.

The great grey shrike is found in Europe, and breeds at Valkenswaard, in Holland, and I have a number of sets that were collected in that country. It does not breed in the British Islands, being only an occasional visitor there.

The white-rumped shrike breeds commonly in Ontario, and its eggs have been taken near Toronto.

A pair of Baltimore orioles were flying around, the male bird piping away; they were evidently nesting somewhere along the banks of the stream. I startled a belted kingfisher from a fallen branch of a tree overhanging the water, and it flew away down stream. This bird is common in Ontario, and frequents all the streams north of Toronto which empty themselves into Lake Ontario. I have only twice taken the trouble to dig down to its eggs. The first clutch of seven

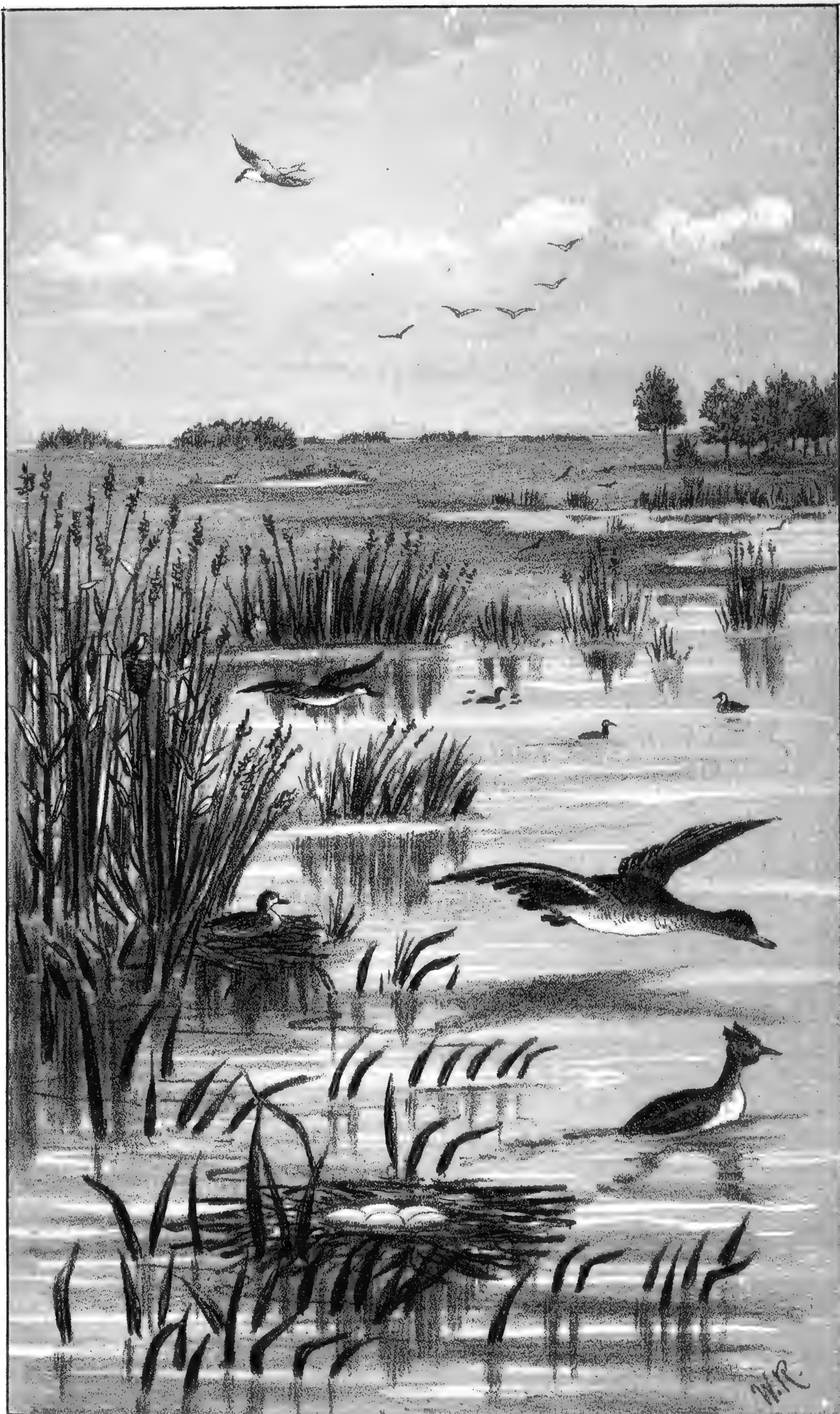
eggs were taken May 20th, 1887. The nest was in a sand bank, two feet from the entrance. The second clutch, taken May 24th, 1888, was in a high sand bank, thirty feet above the stream. The burrow was two feet from the top of the bank, and penetrated three feet into the cliff, where I found the six glossy white eggs resting on a bed of fish scales and bones. The eggs of the belted kingfisher are as large as those of the European roller, averaging 1.35x1.05.

Walking along the banks, I came to a place where the stream drained a pond, and disturbed a Carolina crake out of some rushes; it swam about with a jerking movement, like the English water hen. I took off my boots and waded to the rushes and found its nest containing three eggs. Here several red-winged starlings had nests containing four and five eggs each. A killdeer was seen running round the edge of the pond, and it took me some time to find the four eggs; the nest simply consisted of a hollow scraped into the ground by the birds and lined with bits of grass.

The eggs of the killdeer are very attractive. I have twelve clutches of four eggs. The ground colour is drab or clay-coloured, thickly spotted and blotched with blackish-brown and umber; in some eggs the markings have a scratchy pattern.

At the far side of the pond I flushed a green-winged teal off its nest and nine buff-coloured eggs. The nest was a mere depression in the ground amongst the grass, and lined with down. This is a handsome little duck and a favourite amongst sportsmen. I also flushed a female American widgeon, but could not tell exactly where it flew from. I searched amongst the grass for twenty minutes without finding its nest, so gave it up.

I had now reached the stream at the other side of the pond, which was still fringed with bushes and small trees, and flushed a night-hawk from under a bush, and there found its two marbled eggs laid on a dead leaf. The eggs are rather handsome, greyish white, mottled with dark grey and olive. This bird is common in Manitoba and Dakota, and I have a



NEAR VIRDEN.

number of clutches that were collected here last summer. The eggs of the western night-hawk are a trifle smaller and paler than those of the common night-hawk found in the east.

A sparrow-hawk came dashing down the stream and flew close by, it evidently did not notice me standing behind a bush.

Bronzed grackles and red-winged starlings' nests were in sight most of the time—many of the grackles' nests containing young birds.

I saw a lesser redpole and tried to follow it to its nest, but was not successful.

This species breeds in the British Islands, and is common as far south as Yorkshire, in England, where I have frequently found its nest and eggs. It also is very common around York, where it builds its nest in hawthorn hedges; I never found a nest containing more than five eggs. On a table before me are ten nests and eggs of the redpole from England. The nests are made externally of dried grasses, mixed with moss, they are compact, neat structures, and deep inside; they are lined in some cases with sheep's wool, others are lined with hair and feathers. The eggs do not vary much, and are easily recognized by an experienced eye. They are bluish-green, spotted chiefly around the larger end with reddish-brown, the markings often forming a zone round the butt end of the eggs. Some winters, large flocks of redpoles pass through Ontario, accompanied by pine and evening grosbeaks. During the winter of 1890-91, I saw large flocks north of Toronto. At the same time I saw a flock of over fifty evening grosbeaks feeding on the ground under some pine trees; a few days later I obtained a fine pair that were shot in Toronto. Later on I purchased a pair of pine grosbeaks that had been shot in one of the principal streets in Toronto, where they were feeding on the mountain ash berries.. A boy also brought me a handsome male pine grosbeak he had shot with a catapult. During this same winter a number of pine grosbeaks were caught alive and kept in cages. The following May a pair built a nest in a cage and laid four eggs; I bought two of the eggs from Mr.

Porter, of Toronto, the owner of the birds. The eggs are greenish-blue, spotted around the butt end of the eggs with dark brown and lilac, and measure 1.05 x 75 and 1.02 x 73. These eggs are a trifle larger than several clutches I have from Lapland. I have a series of twenty eggs of the pine grosbeak from Tornea, Lapland, consisting of five sets of four eggs each, so that four appears to be the regular number of eggs to a clutch. A clutch of four eggs before me, collected at Tornea, Lapland, June 13th, 1890, are very handsome. The ground colour is bright greenish-blue, and they are heavily spotted with purplish black and pale lavender shell spots. At the larger ends are other spots of dark purple, and the markings almost form zones around the butt ends of the eggs. Another clutch of four eggs collected in Lapland, June 7th, 1890, are pale-bluish with a glaucous shade, they are spotted with purple-brown and purple-grey, chiefly about the butt end.

The nests are built in small trees and made of twigs and rootlets. Mr. Porter, who owns the birds that laid the eggs in captivity, remembers the pine grosbeak nesting some years ago near Lake Simcoe. He says the birds used to come around his house every winter and leave early in spring, with one exception when a pair remained and built a nest in a fir tree in his garden. This is the only instance I know of their breeding in Ontario. They retire to the north to breed around Hudson's Bay and Labrador, a few remaining to nest in New Brunswick and around the Gulf of St. Lawrence. The evening grosbeak is also a handsome bird; as before stated, several flocks visited Toronto during the winter of 1890-91.

This species breeds in the Northern Rocky Mountains, but its eggs are almost unknown in collections and are consequently very valuable. It is reported as a common resident in the forests of Washington Territory. A nest of four eggs, on the point of hatching, was found in Yolo County, California, May 10th, 1886, but could not be preserved. These eggs are said to be similar to those of the black-headed grosbeak. This species breeds in British Columbia, and when that country be-

comes better populated and can boast of half a dozen resident oologists, its nest and eggs may become better known. Like the pine and evening grosbeaks, the red crossbill and the white-winged crossbill sometimes visit Ontario in flocks during the winter months. They frequent the gardens in the outskirts of the towns, and are shot by boys with catapults. Some years ago a pair of red crossbills bred at Kew Gardens, three miles east of Toronto. The nest and eggs were taken early in April, 1884. This species is known to breed in the United States, in Minnesota, Northern New England, and from thence northward throughout Canada. Its nest and eggs have also been taken in the Lower Hudson Valley and in Pennsylvania. The eggs are laid while the snow is on the ground in March. The white-winged crossbill is a summer resident near Shoal Lake, Lakes Winnipeg and Manitoba. A set of four eggs in my collection doubtless belongs to this species. They were taken near Shoal Lake, Manitoba, March 27th, 1887. The nest was in a pine tree, twenty feet up, and the eggs are white, with a faint greenish tinge; they are spotted at the larger ends with dark brown, and have also numerous speckles of lavender grey, which almost form a zone around the butt end of the eggs. The eggs of this species are like those of the European and parrot crossbill in my collection, and they are not unlike eggs of the European greenfinch in general appearance, but are larger. The four eggs of the white-winged crossbill before me average 0.78x0.55. Dr. Brewer describes a saucer-shaped nest of this bird. It was made of lichens, encased in spruce twigs, lined with hair and bark shreds, four inches in diameter, with a cavity an inch and a half deep. The eggs were pale blue, spotted at the large end with fine dots of black and ashy lilac. This nest was taken in New Brunswick.

The white-winged crossbill has on several occasions been obtained in Great Britain. Mr. Hastings enumerates several instances in which they were observed. On one occasion "a large flock" made its appearance near Banff, Scotland, in 1859. He also says, "Some years ago Dr. Dewar, of Glasgow, when six hundred miles off Newfoundland, observed a number

of these birds crossing the Atlantic before a stiff westerly breeze. Many alighted on the rigging, and ten or twelve were secured."

I now struck out across the prairie, and examined a slough fringed with rushes, and found a nest of the short-billed marsh wren, containing five eggs. The nest was like that of the long-billed marsh wren, which were also numerous. The eggs of the short-billed species are glossy white. Soon afterwards I found a nest containing seven chocolate-coloured eggs of the long-billed marsh wren. There were several empty nests around, and it is well known that the male marsh wren continues building a number of nests, while the females are incubating the eggs. The number of nests frequently observed in a small piece of marsh, within a few yards of each other, is astonishing, and apparently out of all proportion to the size of the colony inhabiting the patch of reeds. Several kildeers were observed near the slough, but I could not find their nests, although I lay down and concealed myself, in hopes that they would return, so that I could startle them off their nests.

A ruddy duck had a brood of seven young ones, which she led away to the far side of the slough. A clutch of six eggs of this bird before me are creamy buff, with a finely granulated surface. They are large for the size of the bird, averaging 2.50x1.75. This set was taken in South Dakota, June 14th, 1891. The nest was like that of a coot, a large structure of floating rushes anchored to growing rushes. As it was after five o'clock, I turned back, crossing the prairie towards Virden. I flushed a prairie horned lark off its nest and four eggs, and not many yards from this nest I also startled a chestnut-collared longspur; the bird flew up, and, searching the spot, I soon found its nest containing five eggs. They are greyish white, spotted with dark purple brown, and blotched with neutral tint. I had now more eggs than my box would hold, so I wrapped some of them up in my handkerchief and carried them in this way. After half an hour's walk across the prairie, the houses of Virden began to appear, and in passing some bushes near the village I discovered a nest and four

eggs of the clay-coloured sparrow. The eggs are not unlike those of the chipping sparrow, being greenish blue, spotted at the largest ends with brown.

After a refreshing wash and a good supper, I again strolled out, this time going north of Virden, towards a stretch of small timber. On my way I passed an Indian tepee, and the squaws were busy getting their supper ready, and were roasting a prairie chicken over a fire of sticks. On reaching the outskirts of the wood I startled a meadow lark from the root of a bush, and found its nest and five eggs. They are white, spotted with rusty brown and purple. The nest was made of grass, covered over at the top, and with a side entrance.

I came across a tree with a large hole about twenty feet up, and, striking the tree trunk, a small hawk flew out and began flying around screaming. It was a sparrow hawk. The tree was easy to climb, and, putting my hand into the hole, I felt four eggs, which were quite warm. I drew them out, and, putting them into my pocket, I descended to the ground. This was a pretty set, ground colour rich buff, blotched with reddish brown. They were slightly incubated.

The sparrow hawk is plentiful throughout Manitoba, and he is a gallant, dashing little warrior. He often swoops down upon thrushes and other birds almost as large as himself. He is very destructive to sparrows and other small birds. Like the European kestril, the American sparrow hawk has a habit of hovering almost motionless in mid-air, when he suddenly drops down upon a field mouse or small bird.

This species often lays its eggs in a deserted woodpecker's hole, and sometimes occupies the old nest of a crow or magpie. The eggs of this bird are very much like those of the lesser kestril of Europe. A series of fifty eggs before me show the usual variations found amongst falcons' eggs. The ground colour varies from cream to yellowish-red or pinky-buff, blotched, spotted and clouded with chestnut-brown and cinamon. They average in size 1.35 x 1.12.

The sun was fast going down behind the western horizon, and the small birds, thrushes, meadow larks, warblers, vireos,

and vesper sparrows, were singing before going to rest. The whip-poor-will had begun to call, and the nighthawks were screeching high in the air. I came out of the wood and turned my steps towards Virden, and as I was tired out, on reaching the hotel, I soon retired to my room. After examining the number of clutches I had collected during the day, and entering up my notes, I laid down and was soon asleep.



WEST OF VIRDEN.

CHAPTER XIX.

JUNE 17th.—Soon after breakfast, the train came along from the west, and in a few minutes I was on my way to Oak Lake, arriving here about 9 o'clock. Having secured a room at the hotel opposite the station, I hired a horse and buggy and instructed the hotel proprietor to make me up a lunch to take along with me. Having enquired my way to the lake, I drove away from the village. Oak Lake is situated about five miles south-west of the station of that name.

It was a lovely June morning, and I felt in splendid form and very light-hearted as I drove along the winding trail, southward. The balmy atmosphere was laden with perfume from sweet-scented flowers, and several bobolinks were singing merrily along the roadside. I had to pass through a bushy district of scrub oak, and noticed a pair of Swainson's buzzards circling over the trees, so I made up my mind to examine this place on my return; being anxious to put in a good day at the lake, I drove onward. After going along several trails that only led to farm houses, and having to turn back more than once, the glistening lake at last came in view. It appeared to be about five miles long by two broad.

On its northern shores are several bluffs, so I tied the horse to a tree and explored some of them. I was soon saluted by a number of bronzed grackles, and presently came upon a number of nests which mostly contained young birds, some, however, only contained two or three fresh eggs. A crow came flying over my head, chased and tormented by a pair of king birds. The king bird is well named, "tyrant fly-catcher," they are very pugnacious during the breeding season, attacking and driving off birds much larger than themselves whenever they come anywhere near their nests. My first find of importance was a nest and four eggs of the clay-coloured sparrow. The

male bird was singing, perched on a twig, and close by I flushed the female off her nest which was built in a shrub two feet above the ground. The nest was similar to that of the chipping sparrow, and the eggs closely resemble those of that species. In a series of 20 eggs, however, it is noticable that the spots are lighter coloured than those on the chipping sparrow's eggs. The eggs of the clay-coloured sparrow are bluish-green, spotted at the largest end with sienna-brown. The bird never lays more than four eggs which measure about 0.60 x 0.50. After going through the bluffs I led the horse down to the margin of the lake and allowed him to quench his thirst, after which I let him feed on the grass, while I examined the rushes that fringed the lake. On my approach a number of western grebes swam out of the rushes, making a cackling kind of a noise. I went back to the buggy and put on my long rubber boots which I had fortunately brought along with me. I then made for the rushes and soon found five or six nests of the western grebe. Two of the nests contained young birds just hatched, and another nest contained five eggs on the point of hatching, a fourth nest contained five eggs partly incubated, but I was able to make good specimens of them. There were two or three other empty nests. The nests were composed of decayed sedges matted together, and were about a foot and a half in diameter, and floated on the top of the water, anchored to the growing rushes.

The eggs are dirty yellowish white, stained with brown, by coming in contact with the decayed vegetation which the nests are composed of; size 2.43x1.55. The western grebe is a graceful bird, and an expert diver and swimmer. It is the largest of the North American grebes. It breeds plentifully on several of the lakes in Manitoba, and especially at Shoal Lake. A great number also breed at Devil's Lake in North Dakota.

All the grebes have a habit of covering their eggs with weeds before leaving them, and some nests I found at Long Lake were quite warm, caused by the fermentation of decayed damp rushes, which reeked with steam like a manure heap.

When a grebe is going to leave its nest, it pulls the weeds over its eggs, and after covering them slides into the water and swims off, but when the birds are startled off their nests suddenly, they have not time to cover the eggs. The only nests of eggs I found not covered with weeds were those I startled the birds from.

Further round the lake I saw a pair of red-necked grebes swimming about. Foster's terns, common terns, and ring-billed gulls were also numerous, but I could not find the spot where they were nesting. All these three species breed at Plum Lake, a few miles further south, and they are also numerous at Whitewater Lake, at the foot of Turtle Mountain. Here the nests of common terns and ring-billed gulls are said to be so numerous that the small island in the lake is almost covered with their nests. The terns lay their eggs in hollows in the sand, but the ring-billed gulls make their nests of weeds, in which they lay their eggs. These vary considerably, but are at once distinguished from eggs of the American herring gull by their smaller size. In " Nests and Eggs of North American Birds," by Oliver Davie, the size of the ring-billed gull's eggs is said to be from 2.75 to 2.80, by 1.60 to 1.75. This must be a mistake, as Professor Ridgeway, in his manual, gives the average size as 2.39 by 1.71, and the latter is the average size of a series of eggs now before me.

On the lake a number of mallards, shovellers, pintails and other ducks were seen, and some of them had broods of young ones swimming around them.

While wading through the rushes around the margin of the lake, I was startled by a pair of large birds flying up a few yards in front of me, and I soon saw they were little brown cranes. There I found their nest, and was greatly disappointed to find it empty, but apparently all ready for the eggs. The nest was very large, about three feet in diameter, and stood about a foot above the shallow water; it was made of rushes and aquatic plants, with a slight cavity at the top, and was built in a clump of thick rushes. I was evidently a week or ten days too early for the eggs. I wandered around

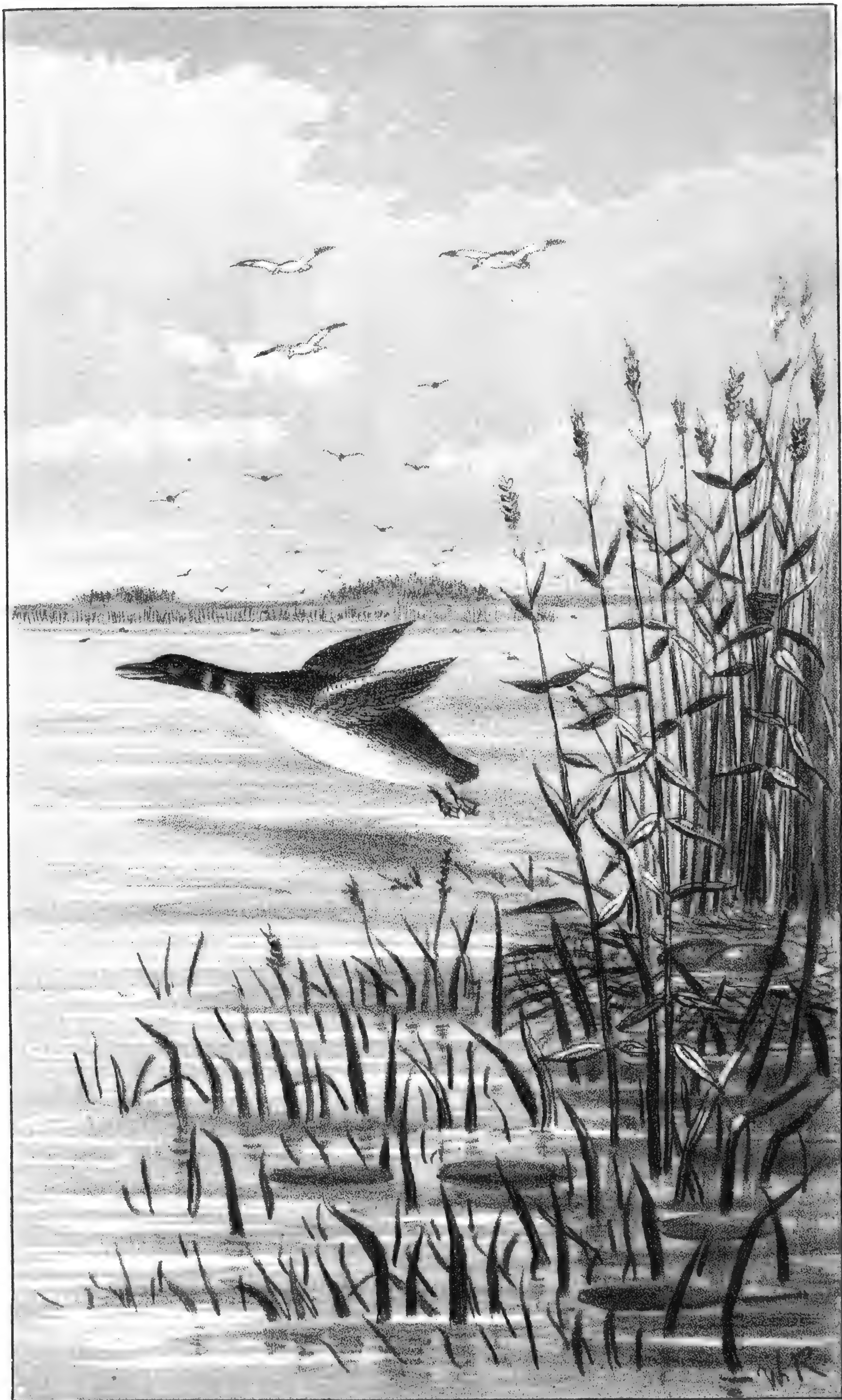
the lake for a mile or so, and then looking at my watch I saw it was dinner time, so I returned to the horse and buggy and had lunch. On my way to where the horse was feeding, I came across a nest of four eggs of the killdeer.

After resting awhile, I drove around the western shore of the lake, tied the horse to a fence, and then examined the rushes which fringed the lake. Yellow-headed blackbirds and red-winged starlings swarmed amongst the rushes.

Further on, I saw the rushes grew very thick, and the wild rice stood six feet high, so I went in this direction, and disturbed a number of ducks, but did not find their nests. I was startled by a loon flopping out of the rushes; it flew out towards the lake, and settled some distance from the shore. A few steps further, and I beheld its flat nest of rushes: with two large, handsome eggs resting in a cavity at the top. The nest was built near the water's edge, and consisted of a mass of sedges and grass. The eggs were slightly incubated, and are dark olive brown, spotted with black; they measure 3.60x2.25, and 3.55x2.20.

The loon, or great northern diver, is a handsome bird, and sometimes weighs as much as fourteen pounds. It is a common bird in Manitoba, and breeds around most of the lakes and larger sloughs. It also breeds plentifully in Ontario, about the Muskoka Lakes and around Lake Simcoe. It breeds regularly all along the northern part of the United States, in Dakota, Minnesota, Wisconsin, Michigan and New York. In marshy districts, this bird makes a nest of sedges, grass and sods near the water's edge amongst the rushes, but in rocky districts, like Muskoka in Ontario and the Adirondack Mountains in northern New York, it makes no nest, but simply lays its eggs in holes in the sand, or on the rocks near the water's edge.

This bird is common in Iceland, from where I receive a number of clutches every year. The number of eggs to a clutch is generally two, but occasionally as many as three eggs have been found in a nest. They are rather late breeders, seldom having eggs before the middle of June. A set of two eggs before me were collected by J. W. Banks, at Ball's Lake, New Bruns-



LOON'S NEST.

wick, June 20th, 1889. The nest was composed of lily leaves, grass and rushes, and was built in shallow water. Another set of two eggs in my possession were collected as late as August 4th, 1889, at Lake St. Joseph, Muskoka, Ontario; in this case there was no nest, the eggs were simply laid in a hole in the sand near the water's edge.

In an open drawer before me is a series of eighteen eggs of this species. The eggs of the great northern diver are very dark-looking and do not vary much, some are olive-brown, others olive-drab or chocolate, spotted and blotched with dark brown or black. In shape they are long and narrow, and average in size 3.55 x 2.30. I have on more than one occasion seen loons in Toronto Bay, but they do not breed nearer than Lake Simcoe.

The red-throated loon is also a common summer resident in Manitoba, and breeds around Shoal Lake, and Lakes Winnipeg and Manitoba, and in the extensive swamps about the mouth of the Red River. Further east it breeds about Quebec, and on the islands at the mouth of the River St. Lawrence, and in New Brunswick.

Mr. Frazer found this species breeding on the islands and along the coast of Labrador. The eggs were found on the edge of the smaller ponds. The birds make no nests, but lay their eggs in hollows in the ground close to the water's edge. The red-throated diver is plentiful in Iceland, and also breeds in the British Islands, on the Scottish mainland, and in the Shetland and Orkney Islands, as well as the Hebrides. It is common around the shores of the White Sea, Northern Russia, and I have clutches from that locality, that were taken at Archangel. I have a series of twenty eggs from Iceland, there fresh eggs are collected from the middle of June to the middle of July. They are similar in colour to those of the common loon, but, of course, are half the size; they vary from olive-brown to olive-drab, some are greyish-brown or deep reddish-brown, spotted with black. In size they vary from 2.60 to 3.00 long, by 1.65 to 1.90 broad.

The third species of loon, which inhabits Great Britain as well as North America, is the black-throated diver. In North

America this species is more rare than the common and red-throated loon, and is not often observed in the United States. Its summer home is within the Arctic circle. The black-throated loon is known to breed in Sutherland, in Scotland, and also in the Shetland Islands, and in the Hebrides. This species also breeds in Norway and Sweden, and is common in Lapland, but does not breed in Iceland, where the common loon and red-throated diver are abundant. In "Nests and Eggs of North American Birds," by Oliver Davie, a set of two eggs of this bird is recorded as coming from Iceland, and now in the collection of J. Parker Norris. This is evidently a mistake, as the black-throated loon is not found there, besides, the measurements of the eggs are too large, as this species never lays an egg 3.40x2.11. Professor Ridgway gives the size as averaging about 3.09x1.96. The above set recorded from Iceland is doubtless a clutch of the common loon. I have received dozens of eggs of the common and red-throated loons from Iceland for the past seven years, but never yet obtained an egg of the black-throated loon from that country. Before me is a series of fourteen eggs of the black-throated diver, all from Lapland. The following is the measurement of four of the sets :

Set 1. Two eggs, collected at Tornea, Lapland, June 22nd, 1888 : size, 3.23x1.92 and 3.28x1.95. Set 2. Two eggs, from Tornea, Lapland, June 20th, 1886 : size, 3.25x2.00 and 3.20x-1.97. Set 3. Two eggs, from Lapland, June 16th, 1890 ; size, 3.33x1.93 and 3.25x1.92. Set 4. Two eggs, from Lapland, June 18th, 1891 ; size, 3.25x2.00 and 3.18x1.97.

It will be seen from the above data that in Lapland this bird lays its eggs about the middle of June. In colour the eggs of this species are like those of the common loon, but they are less in size. The home of the various species of loons is on the water, and they are awkward and helpless on land, on account of their legs being so far behind. They are splendid swimmers and divers, and can make rapid progress under water.

I took the eggs back to the buggy, and then drove the horse further round the lake. Out in the deep water were a number of ducks, grebes, coots and gulls, and amongst them I saw

a male buffle-headed duck, no doubt the female was sitting on her eggs in some hollow tree in the bluffs around the lake.

A clutch of ten eggs in my possession were collected at this lake, May 25th, 1890. The nest was found in a hole of a decayed tree fifteen feet from the ground, and the hole was lined with feathers and down. The eggs are greyish-buff and average 2.00x1.45.

I again tied the horse to a fence and went and examined a bluff, in hopes of finding some hollow tree containing a nest of the buffle-head, hooded merganser or summer duck, but with the exception of a few crows' nests and grackles, I found nothing worthy of note. A pair of double-crested cormorants flew across the lake. They nest on some of the larger lakes of Manitoba. Hundreds breed at Elk Island, in Lake Winnipeg: some make their nests on low trees, and others nest on the ground. The nests are made of sticks and rushes, and usually contain three or four eggs, bluish-green in colour, with the usual chalky surface; the size averages 2.50x1.55.

Thirty miles south-east of Oak Lake is Whitewater Lake, at the foot of Turtle Mountain, a good place for the sportsman in the fall of the year, when this fine sheet of water is covered with thousands of ducks and geese. A number of skiffs are kept for hire at Boissevain station. Near Whitewater are the Tiger Hills, haunted by moose, black-tailed deer, and black and brown bears, it also being a good locality for Canada grouse. Camp outfit must be taken, but the sport is said to repay all trouble, as ample occupation can be found for both rod, rifle and shot-gun. This lake, as well as most of the larger lakes in Manitoba, is plentifully stocked with fine fish, including heavy maskinonge, pike, pickerel, etc., and they furnish a pleasant change of occupation during weather too warm for game to keep, or when it is desirable to give gun and rifle a rest.

As the horse was getting rather restless, and it was four o'clock, I drove away from the lake, and afterwards found I had left a basket with some eggs in it on the shore of the lake, so I went back, but could not find it; fortunately the basket only contained common eggs.

In driving across the prairie I almost ran over a Bartram's sandpiper, as she sat on her nest; it took me some time to pull the horse up, as he was so anxious to get home, and on turning back I could not find the nest. Bartram's sandpipers sit very close and will almost suffer themselves to be stepped on before taking flight.

On my way back to the hotel I stopped at a wood of scrub oaks, and saw a brown creeper climbing up a tree trunk, but was unable to find its nest. Both this species and the winter wren breed in the bluffs on the prairies. The brown creeper's nest is usually found built between the loose bark of decayed trees, it is made of twigs, leaves and bark; the number of eggs is from five to seven.

A set of six eggs taken near Toronto, June 4th, 1889, are similar to those of the chickadee. They are white, speckled with reddish-brown, and the nest, a mass of twigs and leaves, was crammed between the loose bark of a fir tree.

Dr. Coues, in "Birds of the North-West," says: "I am unable to perceive any difference between American and European examples of this bird, and I am not aware that any tangible character has been ascribed to our bird by those writers who have technically separated it."

The winter wren also breeds throughout Manitoba. One is recorded as having built its nest in the pocket of a man's coat that was hung on the door of a ferryman's house on the Souris river. This bird also breeds near Toronto, Ontario, where its nest is occasionally found in the upturned root of a fallen tree, this also being a favourable site for this bird's nest in England, where I have found it on many occasions. I have come across its nest in various other situations, such as in the bank of a stream amongst tree roots, or attached to the moss-covered trunk of a tree; but wherever its nest is found, it greatly resembles the surroundings, and the birds wisely adapt the materials to correspond with the site selected, thus helping concealment. The nest is a beautiful compact woven structure, with a hole at the side for an entrance, like that of the water ouzel. It takes very little to make the bird forsake its nest, a

trifling enlargement of the orifice, or straining of the fabric in the effort to send the finger to the bottom of the nest, is quite sufficient to cause the nest to be deserted. The number of eggs laid is from six to eight. They are clear white, with a few fine specks of brown at the larger end. This little bird has a powerful song, and I have heard it at Lorne Park, on the shore of Lake Ontario, where the bird is a summer resident. This bird has a habit of winding in and out amongst the roots or branches of a fallen tree, singing lustily all the while, and when I hear its song I can fancy I am again in Yorkshire, England, where the birds are common.

Some American ornithologists consider the winter wren, brown creeper, golden-crowned kinglet, short-eared owl, marsh hawk, and many other species, distinct varieties of the European forms: but in many cases the differences are so slight that five out of six ornithologists of ordinary acuteness and experience are unable to satisfactorily distinguish any difference between American and European examples. It is a question if there is anything to be gained by naming races distinguishable only by experts, aided by a large amount of specimens.

Of late years there has been a tendency to become too exact, and forms are being named which, five years ago, would have been considered too slightly differentiated to require recognition. Take the shore lark for instance; how this bird is being sub-divided. At the present time there are supposed to be close upon a dozen varieties in North America. The shore lark of Europe differs as much in plumage as the American bird. Those which breed in southern Europe differ somewhat from others which nest in northern Europe and Lapland, climatic influences making a difference in their plumage, but European ornithologists apparently do not consider this sufficient grounds for naming one the northern shore lark, and the other the southern; they evidently consider there is nothing to be gained by so much sub-dividing and splitting, and it is a question whether American ornithologists are not becoming too exact, and if we go on sub-dividing and sub-dividing it will soon become a troublesome question as to what is a species.

In the bluffs I found a number of common birds breeding, such as golden-winged woodpeckers, cat birds and robins. I also noted several American goldfinches, Baltimore orioles, blue-jays, kingbirds and red-headed woodpeckers.

The horse had become very restless, so I got into the buggy and was soon moving at a rapid pace back to the station where I found I was just in time for supper. Supper over, the owner of the horse and buggy then took me for a drive along the banks of the Assiniboine river. North of Oak Lake we drop down into the beautiful picturesque valley of the Assiniboine. In some parts the valley is well timbered and has a park-like appearance. We crossed the river by the bridge, and then drove east along the banks of the Assiniboine, beautiful views presenting themselves at every turn and bend of the river.

The sun was setting in the west, and the birds were singing their evening matins. A number of night hawks were flying over the river, making their presence known by their screeching. A gentle breeze sprang up, bringing with it delicious perfumes from the numerous wild rose bushes. As it was getting dusk we turned back, and stopped on the bridge at twilight and listened to several whip-poor-wills calling, and to the screeching and hooting of the owls in the woods.

On reaching the hotel I was introduced to a local ornithologist, who showed me his collection, and I bought a number of clutches from him, including sets of sparrow-hawk, hawk owl, Swainson's buzzard, rusty grackle, clay-coloured sparrows, great grey shrikes, and others. I also bought a clutch of two eggs of the whooping crane from a boy who had collected them on the prairie north of Oak Lake. It is a handsome set, and the large eggs are yellowish-drab, blotched with brown and greyish-purple, and measure 3.90x2.53, and 3.95x2.55. The nest was a flat structure of rushes and grass, two feet in diameter, and was found near a slough. Soon after ten o'clock, I retired for the night.

CHAPTER XX.

JUNE 18th.—This morning I was up early and out before breakfast, and strolled through the bush south of Oak Lake. Here I found a number of common woodland birds nesting. I came across a nest of the cedar bird and five eggs, built in a poplar; the nest was made of twigs, leaves and grass, lined with fine roots. The eggs are slate-coloured, spotted with dark purple-brown. The cedar bird is a late breeder, seldom having eggs before the end of June, fresh eggs often being found as late as the second week in August. This bird has been obtained in England. I saw several great northern shrikes, Canada jays, meadow larks, bobolinks, clay-coloured sparrows, warblers, and other small birds. I did not find a nest of Brewer's blackbirds in the North-West, neither do I recollect seeing the bird, but rusty grackles and bronzed grackles, red-winged and yellow-headed blackbirds are plentiful everywhere in the bluffs and around the sloughs. They all go under the name of blackbirds, and share in common the curses of the settlers, on account of the damage they do in the harvest field.

The Canada jay or whiskey jack is not a rare bird in Manitoba, but its nest and eggs are seldom obtained. They breed in the bluffs and in tamarac and willow swamps, and the birds often visit the farms, and are well known to the settlers. The nest is usually built in spruce or tamarac trees, and made of twigs, bark and grasses, and the four or five eggs are greyish-yellow, finely marked with spots of brown or slate colour, and they average in size 1.20x0.70.

Another well-known bird whose eggs are seldom obtained is the Canada grouse or spruce partridge. They breed on Turtle Mountain and in the Riding and Duck Mountains, and in eastern Manitoba, along the Winnipeg river. Further east they breed along the northern shore of Lake Superior, and on the

banks of the Ottawa river, and are plentiful about Quebec, Labrador, New Brunswick, Nova Scotia and Maine. The nest is made on the ground under the low, horizontal branches of fir trees, often in swampy situations. It consists of a hollow in the ground, lined with leaves and grass, and the number of eggs varies from nine to fifteen. A set of ten eggs before me are very handsome, they are rich cream, thickly spotted with reddish-brown, and measure 1.70x1.20. They were taken near Quebec, June 5th, 1890.

The American hawk owl occasionally breeds about Oak Lake. A clutch of four eggs in the collection of Charles E. Doe, of Providence, was taken here June 2nd, 1891. The nest was made of sticks and leaves, in a scrub oak, 20 feet from the ground. I have two sets of eggs before me that were collected in Manitoba, as well as several skins of the birds. A clutch of four eggs was taken April 20th, 1890, at Lake Frances, in Manitoba. The nest was built near the top of a fir tree, and was composed of sticks and leaves, and lined with feathers and grass. Another clutch of five eggs was taken at Minnedosa, at the foot of the Riding Mountains, May 15th, 1891. The eggs are the same size and similar to those of the short-eared owl, and can be distinguished from those of the long-eared owl by their smaller size; they average 1.55x1.23. This bird becomes more numerous towards the north of Lake Winnipeg, and on the north Saskatchewan, and west of Hudson Bay, throughout the fir countries. It is common around Great Slave Lake, and Mr. MacFarlane found a number in the Anderson River region, nesting in the top branches of pine trees. This species is said to breed in northern Maine, and probably does so in New Brunswick and Quebec, and in the vast unexplored territory lying between Lake Superior and Hudson Bay. Mr. W. H. Dall found a nest containing six eggs on the Yukon, Alaska, April 5th. The eggs were laid in a hollow in the top of an old birch stump, fifteen feet from the ground. The eggs found in a nest vary from four to seven. This species has been obtained in Great Britain.

The European hawk owl is included among North American birds, on account of having been obtained at St. Michael's, in

PEREGRINE FALCON

AMERICAN HAWK OWL & NEST.

Alaska. This bird is found in Norway, and is common in Lapland. I have three sets of eggs from Lapland; one clutch of five eggs was taken at Tornea, Lapland, May 10th, 1886. The nest was made of sticks, leaves and moss, and found near the top of a spruce fir. Another clutch of seven eggs was found at Kittila, Lapland, May 13th, 1889: a third clutch of four eggs was taken at Kittila, Lapland, May 18th, 1890. The average size of sixteen specimens is 1.56x1.25. The hawk owls are the most diurnal in their habits of any of the owl family, retiring to rest at night like ordinary birds, and they are the most hawk-like owls, not only in their habits but in physical aspect. They feed chiefly on field mice and small birds. Another interesting owl found in Manitoba is the saw-whet owl, also called Acadian owl. This species is not at all rare in Ontario, and in the fall of the year a number frequent the railway sheds, in Toronto, along the lake front. Here they stay for several weeks, and feed on the numerous sparrows which inhabit the sheds. Learning from a railway hand that five or six of these owls had been seen about the sheds, I got him to obtain me a specimen, which he winged while it was feeding on a sparrow. I kept this bird alive for a week, but it pined away and died. Though a small bird, only measuring seven inches, it was very spirited, hissing and snapping its bill whenever I went near it. I now have its skin in my possession. This bird inhabits the woods of Ontario, and has been found breeding in Maine and New York. The shrill, harsh notes, resembling the filing of a saw, may frequently be heard in the woods at sunset, on a summer's evening.

Mr. Egbert Bagg records this species breeding near Utica, New York. On the dates of April 7th, 21st and 30th, 1886, he found four sets of eggs of this species, two sets of five and two of seven eggs each. They were taken from deserted woodpecker holes in tree stubs, ranging from twenty-two to fifty feet from the ground. The eggs were laid on the rotten chips, and a few feathers of the owl were also present. The eggs are white, nearly elliptical, and average 1.20x1.02. The number of eggs laid by this bird ranges from four to seven. This bird

has been found in England, and is consequently included in the British list of birds.

I returned to the hotel and had breakfast, and then, packing up, I took the morning train for Raeburn, intending to spend two or three days at Long Lake.

Leaving Oak Lake, we travelled through a stretch of rolling prairie, passing numerous ponds, which offer suitable breeding places for ducks and water-birds; and, thirty miles from Oak Lake, Brandon is reached, which is the largest grain market in Manitoba. It has five grain elevators, and although the town is only seven years old, it has well-made streets and many substantial buildings. To the north of Brandon we have a splendid view for miles across the Assiniboine river, as Brandon is beautifully situated on high ground. Here the mountain time changes to standard time, and we put our watches forward one hour.

Leaving Brandon behind, we cross the Assiniboine by an iron bridge, and ascend a sandy slope, and reach a plateau, near the centre of which is Carberry, a fine district for the ornithologist. After passing Austin, the railway descends into a bushy district, with frequent ponds and small streams, and this appears to be a fine ornithological district, judging from the number of gulls, terns, ducks, and other wild fowl, which were observed on the ponds from the train window.

Soon the train arrived at Portage-la-Prairie, and twenty miles further Raeburn station is reached, my last stopping-place, and thirty-five miles west of Winnipeg.

It was three o'clock in the afternoon when I reached Raeburn, and I enquired at the station if there was a place where I could secure a bed for a couple of nights, and was directed to a white-washed log cabin in the distance, the only dwelling in sight, which the station-master had the audacity to call "the hotel." On arriving here I found an Irishman standing in the doorway, with five bare-legged children playing around him. On enquiring if he could give me bed and board for two or three days, he replied, "Of course I can, that is just what this place is kept for; this is the hotel." So he took my valise, and I

followed him inside. On entering, my eyes caught sight of a shelf crowded with an array of bottles labelled "lemonade, soda water," etc., and, as I was parched with thirst, I called for a drink, but soon learned the bottles were all empty; however, I managed to get some milk, which was very acceptable. I then asked for an early tea, and the proprietor and his wife had a consultation, which resulted in their sending out the servant, a repulsive, lazy Indian squaw, to see if she could get me something to eat at the station. While waiting for my tea, four hungry French immigrants called at the hotel, but neither the proprietor nor myself could answer their questions; they showed by their gestures they were hungry and thirsty, but the poor fellows had to go empty away. Soon afterwards a couple of teamsters called, and asked for a drink, pointing to the grand display of empty lemonade bottles on the shelf; they, in their turn, were sold like myself, and had to go away thirsty, cursing the hotel and the proprietor at not providing something to drink. I saw I was going to have to rough it at this place, as the whole surroundings indicated indolence and poverty. After waiting an hour, my tea was ready, consisting of dark, dirty-looking bread, wishy-washy tea, and some kind of strange meat unknown to me. I was very hungry, so dared not ask whether it was wolf, dog or racoon, for fear my appetite might be spoiled, however, I managed to satisfy my hunger.

It is a great pity this place is not better provided with accommodation. Raeburn is only thirty-five miles west of Winnipeg, and I fared worse here than at any place I stopped at in the North-West. Long Lake does not possess a house where a clean bed or decent meal can be obtained, and I think it would pay some enterprising Winnipegger to go out there and erect an inn; it would be patronized by travellers in spring and summer, sportsmen in the fall, and teamsters in the winter, who. bring tons of fish to Raeburn station from Lake Manitoba.

Putting on my rubber boots, I went down to the lake behind the cabin. Long Lake is about ten miles in length and

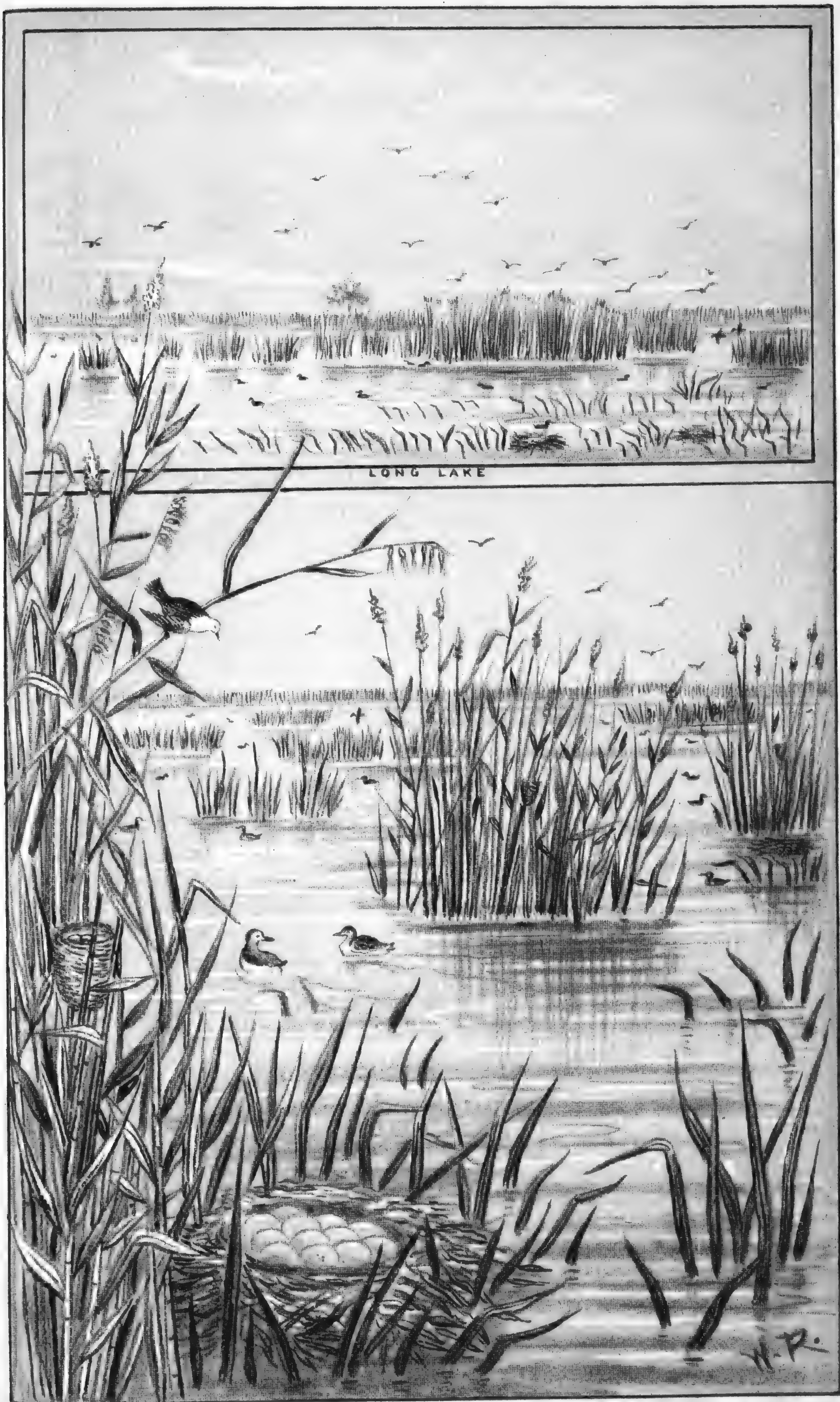
half a mile wide. The Canadian Pacific Railway crosses over it, and I was now at the south end of the lake.

The lake is surrounded with tall rushes and wild rice which grows seven feet high. The place swarmed with birds, and only those who have visited a similar spot, can form any idea of the number and variety of wild fowls frequenting such a marsh. Out in the open water were red-heads, canvas-backs, scaups, and ring-billed ducks, blue-winged teals, shovellers, mallards, western, red-necked, and horned grebe, coots, and other water-birds, while amongst the rushes were hundreds of yellow-headed blackbirds, red-winged starlings, and marsh wrens.

On reaching the margin of the lake I began to examine the rushes, and soon found a number of nests of the yellow-headed blackbird; they are handsome birds with brilliant orange-coloured heads and breasts. Their nests are cup-shaped, and made of grasses and fine rushes, and contain four or five eggs each, which resemble the lark family more than the blackbirds.

Long-billed marsh wrens' nests were numerous, and after examining about a dozen nests I found one containing six eggs. The water soon came over my boot tops, but I did not mind getting my legs wet, for I saw I was going to have some sport.

Just in front of me I saw a large basket-shaped nest, covered with grass and aquatic plants, and brushing them off, I found the nest to contain a beautiful clutch of twelve eggs of the canvas-backed duck. The birds were swimming out on the lake not far away. The nest was similar to that of a coot, and the eggs rested on a bed of down and feathers. They were pale greenish-drab, and as large as the eggs of the red-head. I saw the eggs were fresh, so I put them in my handkerchief and waded towards dry land. A few yards farther, and a Carolina crake stumbled off its nest, just before my feet. The nest was about the size of a basin and made of sedges, and contained eight buff-coloured eggs, spotted with reddish brown.



NESTS OF CANVAS-BACK DUCK & YELLOW-HEADED BLACKBIRD.

I now had as many eggs as I could carry, so I took them to the shore and erected a stick and fixed a piece of paper on the top of it, so that I could easily find the place again. I then explored the rushes further on, and soon found several nests of the coot, containing from six to nine eggs each. As I took the eggs from each nest, I marked each clutch with a pencil, so that I could easily sort out the clutches after blowing them. This is what all collectors should do when they find several nests and eggs of the same species in one day. Supposing you find three nests of coots, containing six, eight, and nine eggs each, the first clutch should be marked 1-6, the second 2-8, and the third 3-9, and so on.

My next find was a floating damp nest of the horned or Sclavonian grebe. The eggs were covered over with rushes, and it is surprising how the eggs can hatch in such a damp situation. The nest contained six fresh eggs, which are a trifle larger than those of the pied-billed grebe.

Coot's nests began to be numerous, and I suppose I could have collected two hundred eggs had I wished, but three clutches satisfied me, so I left the rest. Yellow-headed and red-winged blackbirds' nests were also plentiful, and every clump of rushes contained three or four nests. As I was again loaded with eggs, I waded to the shore once more, and placed the eggs with the others previously collected.

The sun was very powerful, and towards evening the mosquitoes were a terror; my neck was so sore from their stings that I could scarcely sleep during the night. I filled up my soft hat and handkerchief with eggs and carried them further along the banks of the lake towards another part of wild rice. On my way I flushed a male Wilson's phalarope from in front of my feet, and soon found its nest and four handsome eggs well concealed in the centre of a tussock of marsh grass. The eggs are smaller than those of the spotted sandpiper and are clay-coloured, heavily spotted and blotched with blackish-brown. After the female has laid the eggs, she leaves them to the male bird, who sits on them close until the eggs are hatched. The female in the meantime enjoys herself with

other females, who spend their time in feeding and swimming about and flying around chasing each other for sport. Wilson's phalaropes are like turtle doves among birds, they are gentle, handsome in plumage, elegant in form, and graceful in their movements.

In approaching the thick part of wild rice and rushes, two great birds flew up with a big flap and a splash, which gave me such a sudden start that it caused me to stumble into deep water, and I sank up to the waist. I got out as soon as I could, but I was pretty damp. However, I was going to examine that clump of rushes if I got up to the neck in the attempt. So, after wading cautiously, I reached the patch of rushes, when to my delight I beheld a great nest, the size of a cart-wheel and nearly two feet high. Four steps farther, and my eyes rested on—what do you think? Great Scott! two handsome eggs of the little brown crane. Well, you can guess my heart throbbed with joy, and I felt like yelling out at the top of my voice. The eggs were warm, but on trying them with a drill I found they were only slightly incubated. The nest was a mass of rushes and aquatic plants, centre hollowed and lined with grass and feathers, and the eggs were yellowish-drab, mottled and blotched with reddish-brown, and are larger than the eggs of the Canada goose. Putting one in each pocket, I waded to the shore, and as I was very wet I directed my steps to the cabin which was a mile and a half away, and changed my clothes. I took as many eggs as I could carry with me, intending to return later for the rest.

The little brown crane breeds throughout Manitoba and around most of the lakes and larger sloughs. It breeds at Crescent Lake, Oak Lake, Shoal Lake, and amongst the numerous small lakes at the south end of Lake Manitoba. It is also common at Big Grass Marsh which is twenty miles in length and five miles wide, and is situated west of the southern end of Lake Manitoba. This great swamp swarms with bird life, but it is not safe to enter it without a compass, as the rushes and wild rice grow so high it is an easy matter to get lost in this extensive swamp, and it can only be explored by

Spotted Lake 1895.



LITTLE BROWN CRANE & NEST.



YELLOW-SHANK & NEST.

means of a canoe. The little brown crane inhabits the country stretching from Lake Winnipeg north-west to Alaska. It is common at the mouth of the Yukon. Eggs were obtained by Mr. Dall, in the Yukon River, on June 17th. Here they are laid in depressions of the sandy beach, without any attempt at a nest. This species is not known to breed in the United States, but a few pairs may nest in Northern Dakota, near the Canadian boundary. Before me are five clutches of two eggs each, of the little brown crane, all from Manitoba. They resemble eggs of the whooping and sandhill cranes in colour, but are so much smaller that it is impossible to confound them with the other two larger species. The following is a description of these five clutches:

Set I. Two eggs taken at Crescent Lake, Assiniboia, May 16th, 1890; ground colour, light brownish drab, mottled and blotched with pale reddish brown and greyish purple. The blotches are very heavy at the larger ends; size 3.56x2.28 and 3.59x2.30. The nest was composed of reeds, built on a sandy knoll in the marsh.

Set II. Two eggs, taken at Crescent Lake, Assiniboia, May 20th, 1890; ground colour, ashy yellow, blotched with pale chocolate brown and purple grey; size 3.60x2.30 and 3.64x 2.32. Nest made of rushes on a sandy knoll in the marsh.

Set III. Two eggs, taken at Big Grass Marsh, Manitoba, May 29th, 1890; ground colour, light ashy yellow, with a buffy tinge, blotched with sienna brown, and darker chocolate spots at the larger ends; size 3.62x2.25 and 3.53x2.27. Nest, a large structure of rushes, built amongst growing rushes in the marsh.

Set IV. Two eggs, Big Grass Marsh, Manitoba, June 2nd, 1891; ground colour, olive drab, spotted and blotched with yellowish brown and purple brown, with under shell markings of purplish grey, the markings having a tendency to form a zone around the larger ends of the eggs; size 3.47x2.09 and 3.38x2.18. Nest, a large structure of rushes and aquatic plants, built amongst the growing rushes.

Set V. Two eggs, Long Lake, Manitoba, June 18th, 1891; ground colour, yellowish drab, mottled and blotched with red-

dish brown and purple grey; size 3.65x2.25 and 3.62x2.27. Nest, a mass of rushes and aquatic plants, with a hollow at the top lined with grass and feathers.

After changing my wet clothes, I returned to the place where I had left the other eggs, opposite the little brown crane's nest. Looking at my watch, I found it was eight o'clock, and the sun was setting in the west. The mosquitoes swarmed in myriads, and their stings were very painful. The beak of the mosquito is simply a tool box, wherein the mosquito keeps six miniature surgical instruments in perfect working order. Two of these instruments are exact counterparts of the surgeon's lance; the third is a spear, with a double-barbed head; the fourth is a needle of exquisite fineness, a saw and a pump going to make up the complement. The spear is the largest of the six tools, and is used for making the initial puncture; next, the lances or knives are brought into play to cause the blood to flow more freely. In case this last operation fails to have the desired effect, the saw and the needle are carefully and feelingly inserted in a lateral direction in the victim's flesh. The pump, the most delicate of all six of the instruments, is used in transferring the blood to the insect's stomach. The mosquitoes of the North-West are larger, and their stings are more painful, than the eastern pests.

My next find was a clutch of eight eggs of the Virginia rail. The nest was made of sedges, like that of the Carolina crake, and built in a tuft of reeds. The eggs are creamy buff, finely spotted with reddish brown and obscure lilac, and average in size 1.25x95. They can be distinguished from the eggs of the Carolina crake by their paler ground colour and finer markings. I saw a number of nests among the rushes, but did not wish to get my feet wet, so left them until the morrow. The male ducks of many species were swimming out in the open water, while the females were, no doubt, sitting upon their nests among the rushes. I noticed canvas-backs, redheads, teals, mallards, shovelers, pintails, buffle-heads, American widgeons, ring-neck ducks, and others. Black terns were

skimming over the lake like swallows, and the blackbirds, marsh wrens and bull frogs began to make a great noise as the sun was fast disappearing behind the western horizon. Several bitterns had begun to boom, and the croak of cranes, and the cries of coots, rails and ducks, all mingled together, made a noise that might be heard three or four miles away.

I put the eggs into my handkerchief and turned in the direction of the cabin. I was surprised to find it was half past nine, and still light. The days are very long on the prairies. It was dusk at ten o'clock, and so I got the proprietor of the cabin to show me to my room. We climbed up a rickety ladder to the loft, and here I found my bed. I would as soon have slept on a bundle of straw in his barn. The little room was very close, and the small window was a fixture and could not be opened. My room was divided from the others by boarding five feet high, and on looking over the top into the next room, I beheld an Indian laid stretched on a rude bed. To say I was dissatisfied with my sleeping quarters, was putting it mildly. I placed a chair and box against the door, which had no lock, and putting my revolver under my pillow, I stretched myself on the grey blanket, covering myself with another one. As I lay outstretched on my hard couch, I thought of my comfortable bed at home; however, there is something fascinating in having to rough it, and those who cannot stand these inconveniences had better keep away from the North-West. I tried to go to sleep, but, what with the noise of the kildeers, blackbirds and bull frogs in front of the window, the Indian snoring in the next room, and the irritation of the mosquito bites on my face and neck, it took me some time to get to sleep. During the night I dreamt that I came across a huge crane's nest, that some one had filled with all kinds of plovers', cranes', marsh hawks', ducks' and other eggs.

CHAPTER XXI.



JUNE 19th.—This morning I was up and out early, and found a number of nests of common marsh birds. After breakfast I started out for the bluffs north of Reaburn towards Lake Manitoba. In crossing a three mile stretch of prairiė, I came across several nests of the kildeer, and Bartram sandpiper. On reaching the first bluff, I found a crow's nest containing four eggs advanced in incubation. This is rather a late date for crows' eggs. The bluffs offer suitable nesting-places for the smaller birds, and I soon found a number of nests of king birds, white-rumped shrike and other species. I flushed a meadow lark from its nest containing six eggs. The species found here is the western meadow lark, and in a large series of eggs it is at once seen that the eggs of the western meadow lark are smaller and not so heavily spotted as those of the eastern meadow lark. While walking through one of the bluffs I flushed a whip-poor-will from under a shrub, and there found its two beautiful eggs. They are creamy white, elliptical, quite equal at both ends, and spotted with yellowish brown and numerous shell markings of lilac.

The eggs of the whip-poor-will are rather handsome. I have before me a beautiful set I collected near Toronto, May 24th, 1889. The ground colour is creamy white, over which are large splashes of lilac grey, and on the top of these are spots and blotches of sienna brown. The eggs were found by flushing the bird from in front of my feet. There was no nest, the eggs being simply laid on dead leaves. The whip-poor-will is common in Manitoba, and is more frequently heard than seen. The western nighthawk is also common and breeds in the bluffs, laying its two marbled and spotted eggs on the ground without an attempt at a nest.

In crossing from one bluff to another, I startled a chestnut-collared longspur off its nest and five eggs. These eggs are greyish white, clouded over with purple grey and spotted with purplish black. The nest was similar to that of McCown's longspur, made of dried grass and built under the shelter of a tuft of grass. I also found a nest of the western vesper sparrow, or bay-winged bunting; it was similar to that of the longspur. The eggs are pinkish white, spotted with umber brown, and are larger than eggs of the chestnut-collared longspur. This little bird sings a pleasant song every evening as the sun goes down, and is a great favourite of the settlers. It has a great habit of flitting along the trails in front of an advancing wagon or person, alighting every few yards. I observed several sparrow-hawks in the bluffs. They nest in old woodpeckers' holes. Golden-winged woodpeckers were also common.

I flushed a small bird from the root of a bush and found its nest and four eggs. They were unknown to me, but turned out to be eggs of Leconte's sparrow. They are pinky white, finely speckled with pale brown, and at the largest end they have spots of dark umber brown. These eggs are about the same size as those of the chestnut-collared longspur, averaging 74x52. The nest was made of dried grass and built amongst the grass growing at the root of a bush in a swampy portion of the bluff. The eggs of this species are very rare.

I flushed several sharp-tailed grouse, and at last found a nest and fourteen eggs on the point of hatching. It was built under a bush, and consisted of a hollow in the ground lined with grass and feathers. The prairie in this section is very flat, and the bluffs of pine and aspen stand out like islands surrounded with expanses of damp prairie.

The bluffs swarm with bird life, and this is about the finest country one could imagine. Here the ornithologist can wander along all day and never feel lonely. There is always plenty to interest him. In the bluffs are found all kinds of woodland birds, such as black-billed cuckoos, shrikes, kingbirds, robins, grackles, vireos, jays, warblers, woodpeckers,

hawks, owls, and buzzards, while from under the brushwood one is constantly flushing nighthawks, whip-poor-wills, prairie chickens, grouse and meadow larks. Out on the open prairie may be seen numerous kildeers, curlews and field plovers. Frequently a marsh harrier will come along, skimming a few feet above the grass, while over the sloughs and ponds gulls and black terns are always in sight. Walking along the margin of a slough, one will soon disturb a number of ducks, grebes, bitterns, or rails. Glancing up in the vast expanse of ether, Swainson's red-tailed and rough-legged buzzards may frequently be seen sailing in circles, and occasionally a turkey vulture, whose magnificent ærial evolutions cannot fail to attract attention. Then again, it is a common sight to see an eagle, peregrine falcon, goshawk, or hawk owl perched on the top of some tree which over-tops all the others growing in the bluff. From this elevated situation their keen eyes watch the movements of the various birds below. Now and again they descend with a terrific swoop on some luckless prairie chicken or plover, and carry it off. At other times, falcons, hawks and buzzards sit motionless for hours on the tops of some leafless, decayed tree, and as you approach cautiously, the sticks crack under your feet and the noise causes the wary birds to sail away.

Occasionally one surprises a few graceful, black-tailed deer, who bound out of the far side of the bluff as you enter at the opposite end. At other times a prairie wolf or a fox will slink off as you push your way through the bushes and enter the bluff, and sometimes a black or cinamon bear is met with when least expected, but as a rule the latter at once make off at a rapid pace, with a kind of a fast shuffling walk.

Other small animals, such as skunks, gluttons or wolverines, badgers, hares, squirrels, gophers and snakes all help to make matters interesting to the naturalist, and these animals are all plentiful on the prairies or in the bluffs.

Then the prairie itself is highly interesting, this great sea of green that rolls its grassy billows from here to the Rocky Mountains. Nowhere in the world is there such a breadth of

fertile land untenanted. At some seasons of the year it does not look particularly inviting, but, no matter what the month, the first sight of the prairie makes an impression as profound as the first sight of the ocean. Each season has its distinctive livery. When the warm sun of early April has licked up the snow, the dead grasses of the old year look bleached and flattened out by the storms of winter and the rain. If fires have swept over the prairie in the autumn, a uniform rusty brown is seen in the spring, as far as the eye can reach. At this season, where the soil is high and light, or where sandy ridges occur, the anemone patens, the first flower of the prairie, shows to the sun its pale blue, delicate white, or rich purple tints. The joy with which this harbinger of spring is welcomed by those who have seen no signs of life in garden or field for six long months can hardly be exaggerated. It blooms amid the snows. It flowers before its own leaves appear to live. Soon a tender green begins to flush the boundless prairie. As spring advances, the grasses and plants gather strength. The prairie becomes a sea of green, flecked with parti-coloured grasses, and an infinite variety of flowering plants. The atmosphere, balmy and flower-scented, is also so charged with electricity that the blood courses through the veins under the perpetual influence of a stimulant that brings no lassitude in its train. Summer comes crowded—or rather covered with roses. The traveller across the prairies walks on roses and sleeps on roses. By the end of June the air is laden with their perfume. These are followed by an innumerable variety of asters, solidagos, and the golden coriopsis. But the ripe glories of the year are reserved for the season when summer merges into autumn. The tints of the woods in the older provinces are left behind by the gorgeousness and wealth of the prairies' colours. The reddish hue of the poas and other wild grasses, the salmon-colour of the sedges, the yellow of the bunch buffalo and blue-joint grass, the deep green of the vetches, the saffron-coloured reeds, the red, white, blue and yellow of the rich autumn flowers blend their beauties in a marvellous picture. As autumn advances the grasses take a lighter hue. They are dying. One by one

the flowers disappear. Instead of the variety of colours so splendidly lavished a few weeks ago there is only an unbroken field of yellow, fast merging into white. It is now well on in October. The days are cool, the nights cold. Winter is at hand. Keen frosts kill all the remaining traces of vegetation, but winter is not yet. The sun seems to sweep higher. The atmosphere takes on a hazy and smoky look. The sun is red during the day and at his setting. The frosts cease and the Indian summer of the North-West sets in. Day in and day out, often for weeks, this delicious afterglow, during which existence is a luxury, continues. Then the sun sinks low again and frost puts an end to farming operations, and the winter fairly commences—a winter terrible to the inexperienced for its length and severity, but perhaps the most enjoyable season of the year to Canadians.

Professor Hind, speaking about the prairie, describes its extraordinary aspects in the following graphic language:—"It must be seen at sunrise, when the vast plain suddenly flashes with rose-coloured light, as the rays of the sun sparkle in the dew on the long rich grass, gently stirred by the unfailing morning breeze. It must be seen at noon-day, when refraction swells into the forms of distant hill ranges, the ancient beaches and ridges of Lake Winnipeg which mark its former extension; when each willow bush is magnified into a grove, each far distant clump of aspens, not seen before, into wide forests, and the outline of wooded river banks, far beyond unassisted vision, rise into view. It must be seen at sunset, when just as the ball of fire is dipping below the horizon, he throws a flood of red light indescribably magnificent upon the illimitable waving green, the columns blending and separating with the gentle roll of the long grass, seemingly magnified toward the horizon into the distant heaving swell of a parti-coloured sea. It must be seen too by moonlight, when the summits of the low green grass waves are dipped with silver, and the stars in the west suddenly disappear as they touch the earth. Finally, it must be seen at night, when the distant prairies are in a blaze, thirty, fifty, or seventy miles

away; when the fire reaches clumps of aspen, and the forked tops of the flames, magnified by refraction, flash and quiver in the horizon, and the reflected light from rolling clouds of smoke above tells of the havoc which is raging below." The foregoing pictures belong to the glowing summer, but the prairie, like the shield, has two sides. It should also be seen in a blizzard, if you can see and live, when the snow, driven before the wind, flies level through the air, cutting like a knife, and carrying with it an intense cold that neither man nor beast can face; when, as the storm gathers strength, sky and prairie are blended in an undistinguishable mass of blinding white, and nothing is heard but the mad hurrying and howling of the wind around and overhead, and the hissing at your feet with which it drives through the long grasses that the snow has not covered completely.

It is on a day in the early months of the year, when the thermometer is low, the sky stormy and unsettled, and the wind fierce and steady, that the real blizzard comes; usually from the west, as the prairie grasses show, which always lie flattened out toward the east by the westerly winds. During the height of the storm, settlers hardly dare venture to their out-houses to feed or water the cattle. The poor belated farmer, caught perhaps with his team at some distance from a house, makes for the nearest bluff or woods. The trees bend double before the gale. All around he hears the snap and crash of breaking branches and falling trees, but these are not thought of in comparison with the greater danger that he has escaped. A huge fire can be built, and there is little risk of the firewood giving out. Should there be no friendly shelter of house or bluff near, he may come out from the blizzard alive, but the fine dry snow is so blinding and penetrating and the frost so merciless, that the odds are very greatly in favor of the blizzard. Usually the blizzard only lasts a day or so, but five years ago one in Dakota raged for three days and nights. Everything outside perished, cattle froze to death or starved in their stables. In many cases firewood gave out, and though the furniture, floors and beams of the house were

burned. The older and weaker ones of the family died from the intense cold.

About four miles south of Lake Manitoba I came across a bluff where moose sign was plentiful. How I longed to see a wild specimen of this the greatest of Canadian deer, but in this I was disappointed. This large animal frequents the shores of Lake Manitoba, and a couple of Toronto gentlemen caught a very young moose here last season and released it again after it had been admired. Another party who spent a week shooting in the neighborhood, last fall, shot eight deer, two bears, a lynx, and a great bag of grouse, and one gentleman of the party, who had never seen a live moose before in his life, killed two of these animals in one day. The moose offers splendid sport to the still-hunter, and the Indians and half-breeds are experts at still-hunting. When they perceive a moose bathing on the side of a lake they crawl along the ground until within range and then seldom fail to drop him on the spot; great care, however, has to be taken, for the cracking of a twig is sufficient to alarm the animal.



STILL HUNTING.

The moose is often killed by "calling" him to the hunter in the rutting season by means of a birch-bark horn. In this way the animal can be called within a few yards of the concealed hunter. Another way of killing him is by the aid of a bull's-eye lantern during night. The hunter paddles his canoe along the margin of the lake or river, shining his lantern towards the shore. In this way any moose or deer along the lake shore are attracted by curiosity to approach the light, and as their forms loom up in front of the hunter's canoe along the beach they are easily shot down at close quarters. In winter the moose is hunted on snow shoes, but this method is unsportsmanlike. When the snow is deep the poor moose flounders and sinks up the middle in the snow, while the hunters run along the surface in their snow shoes. The moose is soon tired out and the hunters easily overtake him, killing the helpless creature at close quarters.

According to Sir John Richardson, this animal has the sense of hearing in very great perfection, and is the most shy and wary of all the deer species, and on this account the art of moose hunting is regarded as the greatest of an Indian's acquirements, particularly by the Crees, who consider themselves able to instruct the hunters of every other tribe. The flesh of the moose is very excellent. By nature the moose is timorous, and when excited its weapons are its horns and hoofs, and so forcibly does it strike with the latter as to destroy a wolf or other large animal at a single blow. At such times the hair on its neck is said to bristle up like the mane of a lion, which gives it a wild and frightful appearance.

The moose is found in Northern Europe, where it is known as the elk. The distribution of this animal, both in Europe and America, is remarkably alike, reaching to the Arctic coast in both continents and extending southwards to the same isotherm. The moose is easily domesticated. Formerly these animals were used in Sweden to draw sledges; but, owing to their speed in accelerating the flight of criminals, their use was prohibited under heavy penalties.

The movements of the moose are very heavy, from the great

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height of its shoulders. It does not gallop like other animals of the deer kind, but advances at a shuffling kind of amble, while its hoofs striking against one another make a strange crackling sound which can be heard at a considerable distance. Its speed, however, is great. During the winter it lives chiefly in wooded hills; in summer it frequents the swampy sides of rivers and lakes, often going deep in the water to escape flies and mosquitoes.

The cariboo is also found around lakes Winnipeg and Manitoba, they are fond of the water and are great swimmers. There are two varieties in North America, one called "the barren ground cariboo" and the other "the woodland cariboo. The former variety abounds in the Peace River country and swarms about Great Slave Lake and Great Bear Lake. The Copper Indians and the Dog-ribs and Hare Indians would be unable to inhabit their barren grounds were it not for the immense herds of this deer that exist there.

The woodland cariboo is larger and scarcer, and inhabits the wooded country stretching between Hudson's Bay and Lake Superior. The cariboo is known in Europe as the rein-deer, and is found in Lapland, where it is a useful animal to the Laplander. With two of these yoked in a sledge, the Laps have been known to travel more than a hundred miles a day.

In one of the bluffs I approached quite close to a goshawk which was perched on a decayed tree; it was evidently napping, and the sticks cracking under my feet startled the bird. The American goshawk breeds in Manitoba and Assiniboia. Before me are three clutches that were collected in these provinces. A set of two eggs were collected at Crescent Lake, Assiniboia, May 24th, 1890. They are bluish white, unspotted and slightly nest-stained. These eggs measure 2.40x1.68 and 2.33x1.65. The nest from which these eggs were taken was made of sticks, with bark and leaves, and built in a fir tree. Another clutch of four eggs was taken at Lake Francis, Manitoba, May 16th, 1891. These eggs are also bluish white without spots, and incubation had commenced. These eggs measure 2.16x1.73, 2.12x1.68, 2.09x1.65 and 2.05x1.70. A third clutch

[illegible] Wood [illegible] cover [illegible] 1876 [illegible]
[illegible] badly mutilated



AMERICAN GOSHAWK.



GREAT NORTHERN SHRIKE.

before me are from the foot of the Riding mountains, near Minnedosa, taken May 19th, 1891. The nest was composed of sticks and leaves, and built in a fir tree forty feet up, and the three eggs are plain bluish-white unspotted.

This is a noble hawk, and one of the handsomest of the family when in perfect plumage, and is a decidedly boreal bird. It breeds in northern New England, New Brunswick, Nova Scotia, the province of Quebec and North-West to Alaska, where Mr. Dall records it as abundant, and resident in the Yukon region. The American goshawk has occurred in Great Britain, and is now considered specifically distinct from the goshawk of Europe.

The American rough-legged hawk also breeds sparingly throughout the North-West, and I have a set of two eggs that were taken at Crescent Lake, Assiniboia, May 3rd, 1890. The nest was in a tree, and made of sticks and leaves. The eggs are much larger than Swainson's hawk, which is the most common buzzard in the North-West. These two eggs of the rough-legged measure 2.40x1.87 and 2.34x1.80. The ground colour is dirty white, and one egg is heavily blotched at the smaller end with reddish brown, the other egg being blotched chiefly at the larger end.

Though a large bird, the rough-legged buzzard's quarry is humble. They prey upon field mice, gophers, frogs and lizards. These birds have none of the dash of the falcon. They appear heavy and indisposed to active exertion: flying slowly, and often remaining for a long time motionless on their perch.

As it was one o'clock, and I began to feel hungry, I turned back and worked the bluffs further to the west, where I found a number of nests of common birds, and started a prairie wolf who bounded out of the bluff as I entered. In crossing the prairie to Ræburn station, I came across a nest and five eggs of the chestnut-collared longspur, and also a nest and four eggs of the killdeer. I reached the cabin about three o'clock, and had a lunch of milk and bread and butter, which was all the proprietor of the hotel could offer me,

CHAPTER XII.

AFTER my sumptuous dinner I put on my rubber boots and explored the banks of the lake north of the railway. I came to a place where black terns were numerous, and flushed one from a mass of dead floating rushes: here I found its two eggs laid on the débris. The nest was a very slight affair, just a few blades of grass surrounding the eggs. I set to work and soon found a number of eggs, but as it was yet a little too early, most of the nests only contained two eggs. This species does not commence to lay until the middle of June, and fresh eggs are to be found up to middle of July. I soon collected a fine series, and it is surprising how difficult they are to find, so closely do they resemble the dead rushes and debris they are laid upon. Several times I almost trod upon the eggs, and I found I had to use great care to avoid stepping on them. The nests are very slight affairs in some cases; the eggs were simply laid on the masses of floating debris of last year's reeds, where the water was a foot deep: but occasionally nests were found consisting of a platform of grass or moss. The eggs vary considerably: they are darker in colour than any of the other species of terns. The ground colour is brownish olive, some having a greenish shade, and they are heavily spotted and blotched with rich brown of every shade, from light brown to blackish brown. They are also spotted with neutral tint or stone grey. A series of over one hundred specimens before me show great varieties in ground colour and markings.

The white-winged black tern is included amongst North-American birds on account of a specimen being obtained in Wisconsin in 1873. It was a female, and in the ovary were well-formed eggs, so it was evident it would have bred in the vicinity before long.

The eggs of this bird are larger and lighter-coloured than those of the common black tern. I have a series of eggs of this

species that were collected in south Russia, May 29th, 1888. Here the eggs are laid in similar situations as those selected by the common black tern, the eggs being laid on dead floating rushes in swamps. The white-winged black tern also breeds in Asia Minor, and in southern Europe. It occasionally occurs in Great Britain, but does not breed there.

I came across a number of coot's nests, but did not take any of the eggs, as they are not worth blowing, and I had collected three sets the day previously. The nests are usually large floating structures, and found in water two or three feet deep, and they are anchored to growing rushes.

The next find of importance was a nest and six eggs of the red-necked grebe. The nest was a damp mass of decayed vegetation floating on the surface of the water amongst the rushes, and the eggs were covered with grass and sedges. The eggs are larger than those of the horned and eared grebes, but are similar in appearance, being stained with the decayed vegetation, and have also the usual chalky surface. They average in size 2.25x1.35. A number of these birds breed at Long Lake, and on most of the lakes of Manitoba, and along the Saskatchewan River. It is also found in Alaska.

Several Franklin's gulls began to fly about my head, screaming, as I approached a thick clump of rushes, and soon afterwards I came across a number of their nests. They were built in tussocks of rushes, and were made of sedges and aquatic plants. The number of eggs found in a nest was two or three, and most of them were advanced in incubation, while several contained young birds in down. The eggs are darker than most other gulls: the ground colour varies from light brown to olive-drab with shades of green and ashy: they are spotted and splashed with various shades of brown, chiefly at the larger end, and some have zig-zag lines of brown instead of spots. The eggs can be distinguished from those of Bonaparte's gull by their larger size, averaging 2.12x1.40. Franklin's gulls are beautiful birds, and several adult specimens I shot had their breasts and underparts deeply tinted with rose pink. The bird is common throughout Manitoba, and breeds

in most of the lakes and sloughs. They have a habit of following the plough like crows, and devour the worms and grubs that are turned up by the plough.

Yellow-headed blackbirds were very numerous, and I kept finding nests in every clump of rushes. The nests are attached to the tall rushes, and wild rice, and are deep cup-shaped structures, firmly woven together.

I came across a number of marsh wrens' nests, and after examining several, I found one containing six eggs. In taking the eggs out of the nest, I saw they were those of the short-billed marsh wren. They are glossy white, and are about the same size as those of the long-billed marsh wren.

I flushed a marsh harrier, but could not find its nest, and a short time afterwards a duck flew out of a clump of rushes; it was soon joined by the male bird, and they lighted in the water a short distance from the shore. They were a pair of ring-necked ducks, and I was pleased to find their nest, containing nine eggs, which proved to be partly incubated. The nest was made of sedges, and lined with grasses, feathers, and down: a basket-shaped structure, built in centre of a tussock of rushes. The eggs are olive-grey, with a buffy tinge, and are very similar to eggs of the scaup duck in size and colour, averaging 2.25x1.58.

The male bird has an orange-brown collar round its neck, but this is lacking in the female. This species has been obtained in Europe. The red-headed pochard is a common duck at Long Lake, snd I saw a number during my stay here. They make a nest like that of a coot, a basket-shaped structure of sedges, with a large cavity in the centre, lined with feathers and down. From seven to twelve eggs are laid: they are creamy buff, and are as large as the egg of the canvas-back duck. The eggs of the canvas-back can be distinguished from those of the red-head by their greenish-grey tint, the eggs of the red-head being buffy cream, with a polish on them.

As my hat and handkerchief were now full of eggs, I waded to the shore, and placed them with the others collected previously. I carefully noted the spot, so that I should be able to

return to it again, and then struck out in another direction. In crossing over an island, I found a nest of the blue-winged teal, and the young birds had left the nest, as shown by the broken egg shells. Soon afterwards I flushed a Wilson's phalarope: the four eggs were on the point of hatching, so I did not take them. I startled a bittern from a clump of rushes, and made several attempts to wade to the spot, but the water was deep, and came over my long top boots. At last I managed to reach the spot where the bittern had flown from, but was disappointed to find no signs of a nest. Later I flushed a little brown crane. Ducks and coots kept flying out of the rushes, and the centre of the lake was dotted all over with water birds. I found it a difficult task wading about, as in some places the water was deep, and how I longed for a boat, so that I could get about easily. I made up my mind that when next I visited Long Lake, I would bring a canoe along with me.

I now came to a place where black terns swarmed, and I could see a number of eggs laid on the floating debris, but I could not reach them, as a deep channel of water ten feet wide intervened between this spot and where I stood up to the waist in water, so I had to satisfy myself with gazing on the eggs.

My next find worthy of note was a nest of the horned grebe, known in Europe as the Sclavonian grebe. It contained five eggs, and the nest, as usual, was a damp structure of decayed vegetation: the eggs were covered with grass and aquatic plants.

This species is the only grebe found in Iceland, where it is a common summer resident. It breeds at Rice Lake and St. Clair flats, and other marshy places in Ontario.

The eared and pied-billed grebe also breed at Long Lake, and on most of the lakes and sloughs in Manitoba.

All the grebes are expert divers and swimmers: they sink below the surface of the water almost without making a ripple. They use their wings under water, and when chased in a boat they at once sink, and when next they appear they are far off. At the flash of a gun they immediately disappear under

water, and are difficult to shoot. In some districts they are called hell-divers. Like the loons, they are awkward on land, from the posterior position of their legs: the birds stand almost upright when walking.

Leaving the eggs on the margin of the lake, and erecting a stick as a landmark so that I could find the spot on my return, I walked along the margin of the lake for nearly two miles, but only found eggs of the coot, black tern, Carolina crake, yellow-headed and red-winged black-birds. As it was nearly seven o'clock, and my dinner had long since digested, I turned back, gathering the eggs previously collected on my way to the cabin. For supper the bill of fare was improved, consisting of milk, bread and butter and a couple of boiled eggs. How I longed for a nice piece of juicy beef-steak and a cup of good tea; but I had to be contented with that which was placed before me.

The proprietor told me a boy had some eggs for me, including sparrow hawks and others, so after supper I went to the station and looked him up.

The so-called sparrow hawks turned out to be a nice set of the pigeon hawks, which he had collected in one of the bluffs near Ræburn. I bought all the eggs he had for fifty cents.

The pigeon-hawk breeds sparingly throughout Manitoba and Assiniboia, and is more plentiful in the Saskatchewan region. It also breeds in Ontario, Quebec and New Brunswick. Before me are three clutches.

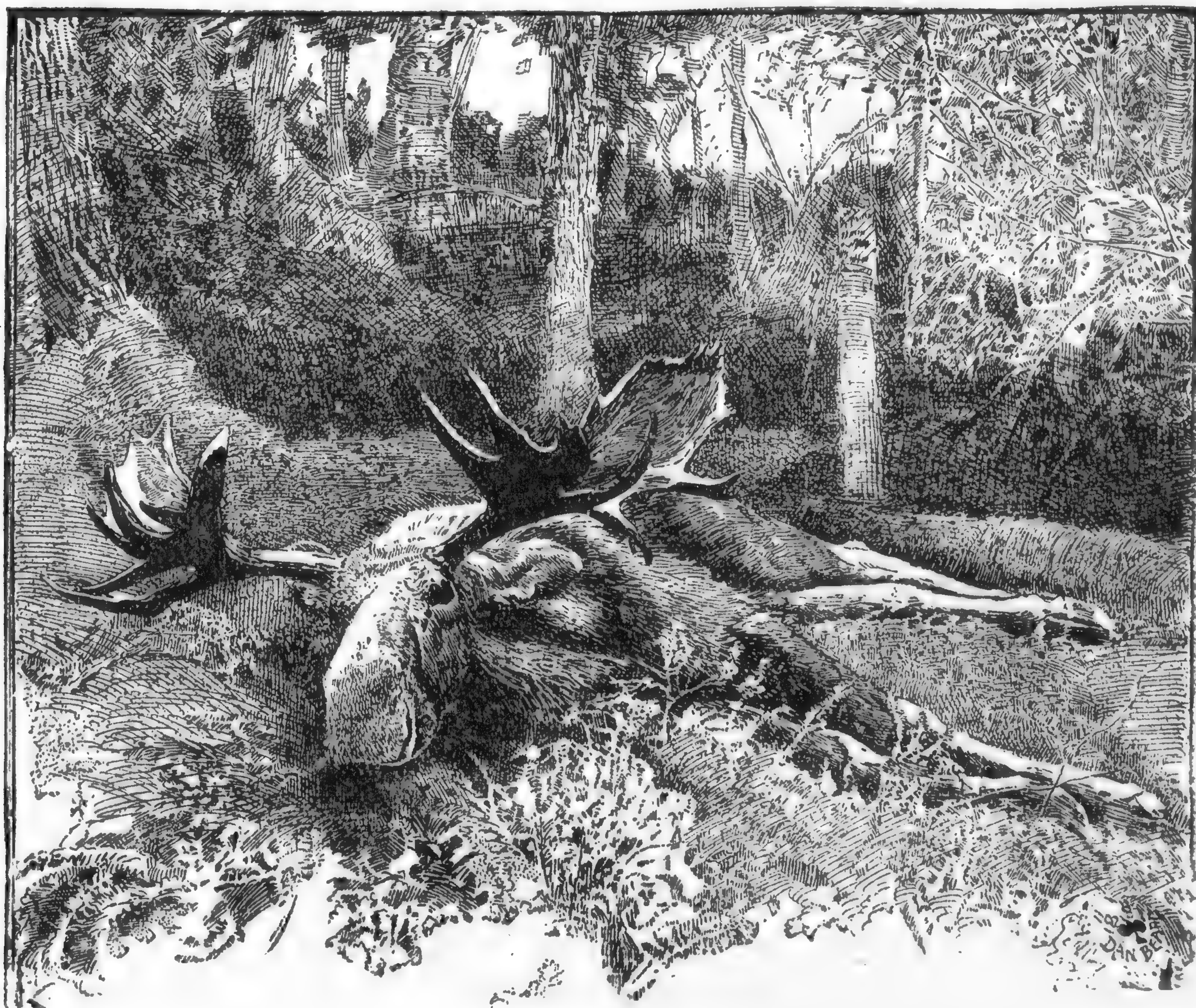
A set of four eggs were collected by J. D. McMurrich at Lake St. Joseph, Muskoka, Ontario, June 15th, 1891. The nest was in a tall pine, and made of sticks and moss. The eggs are very handsome; they remind one of the eggs of the European kestril in style of colouring, but they are smaller and more elongated. The ground colour is yellowish buff, and it is almost concealed by the heavy blotches of rich ruddy brown.

A second clutch of four eggs were collected near Minnedosa, Manitoba, June 2nd, 1891. Nest in a fir tree, made of sticks and leaves. A third clutch were collected near Quebec, May 24th, 1891. The eggs vary in colour, even from the same nest:

some are creamy buff, others cinnamon or yellowish buff, and they are usually heavily spotted, clouded or blotched with various shades of rich reddish brown. The markings generally congregated towards the larger end of the eggs. The average size of twelve specimens is 1.55x1.25.

This bird sometimes nests in hollow trees like the sparrow-hawk.

The sun had sunk behind the western horizon, and the bitterns had begun to boom. Another evening I was entertained by the concert of the birds, coming from thousands of throats. It is no exaggeration to say the noise can be heard three or four miles away from Long Lake. I shall never forget that grand chorus of blackbirds, marsh wrens and bull frogs, intermingled with the screams of the various species of wild fowl, killdeers, and sandpipers, and the booming of several bitterns.



THE DYING MOOSE.

CHAPTER XXIII.

JUNE 20th.—For breakfast this morning, bread, butter and milk were put before me, but the bread was so dark-looking and sour I could not eat it, so I drank a couple of glasses of milk, and then called the proprietor of this so-called "hotel", and asked him what he meant by placing such a meal before me. I really had to use some unparliamentary language, for he had simply starved me for two days. His excuse was that they had run out of provisions, and that the nearest store was at Winnipeg, thirty-five miles away. He said he was going by the next train to Winnipeg to buy provisions. I told him I was also going by the next train to Winnipeg for my breakfast, so I left the cabin in disgust, and went down to the lake to collect some more black terns' eggs, and to have a final look at this paradise for birds. I obtained a number of sets of black tern, and a set of six short-billed marsh wren, and also startled a little bittern from a clump of rushes, and then found its nest and five eggs. The nest was built in the middle of a tussock of rushes: it was a saucer-shaped structure of sedges, and the eggs are plain bluish white, averaging 1.20x.94. In wading about, I came across several nests and eggs of coots and yellow-headed blackbirds, but did not molest them. I also flushed a Carolina crake off its nest and nine eggs, and soon afterwards found a nest and seven eggs of the king rail. The nest of the latter was made of sedges, and built in a cluster of rushes. The eggs are pale buff, and sparsely spotted with reddish-brown and lilac, averaging in size 1.65x1.10. A pair of Swainson's buzzards were flying about the lake; they swooped down several times among the rushes, probably after the young ducks. This is the most common of the buzzards found in the North-West, and build their nests in the trees in the bluffs. The eggs can easily be distinguished from those of

The prairie grasses grow close and sweet
Where the prong-horn is bounding wild and fleet,
And the sod is worn in deep-lined maze
With the mighty bison's forsaken ways.
Bones of the race that was swept away
Await 'mid the herbage their slow decay,
But the bleaching skull and the mould'ring horn,
To tell of the herds by these pastures borne—
Ghastly tokens—spread o'er the land
To prove the work of the butcher's hand.

But sense prevailed in the time of need,
And fettered the bloody hands of greed,
Ere the nobler quarries of hunters aim
Were swept for aye from their native plain.
The elk still leads his stately bands,
And the moose calls loud in the forest-lands,
And the shore of each lake and streamlet clear
Is deeply trod by the herding deer,
And the mink and otter and beaver play
Where the streams flow down on their devious way.

Far on the prairie's unmeasured field,
Lakes unnumbered are bright revealed,
And the air is filled with rush of wing,
Where the myriad wild fowl wheel and swing.
Westward majestic Rockies pile
Their mighty barriers mile on mile,
Where grizzly and goat and mountain sheep
Roam at will o'er ravine and steep.
Head, horn, and skin—each a matchless prize,
But gained in this Sportsman's Paradise.





the other species of North-West buzzards by their smaller size. Before me is a series of twenty eggs of this bird; the ground colour is white or bluish white, and the eggs are usually well-spotted and blotched with reddish-brown.

A set of two eggs taken at Crescent Lake, Assiniboia, May 29th, 1890, are very handsome. The ground colour is clean bluish white: one of the eggs has heavy blotches of rich chestnut brown at the butt end, and the other has the smaller end capped with the same heavy colouring. These two eggs measure 2.25x1.73 and 2.15x1.63.

I saw a red-throated diver swimming amongst some rushes, so waded in this direction and searched the spot for its nest without success.

Later I flushed a little brown crane, but saw no signs of a nest in the vicinity. I took a few clutches of long-billed marsh wren and red-winged starling, and later came across a nest and four eggs of the Bartram's sandpiper on the margin of the lake. I flushed a short-eared owl and also surprised a fox out of the rushes that fringed the lake.

Long Lake is a fine resort for wild fowl, and in the fall of the year the lake swarms with all manner of geese, ducks, and other water birds. In Winnipeg I saw a number of rare plovers and sandpipers that were shot at Long Lake, including specimens of purple sandpiper, sanderling, eskimo curlew, black-bellied plover, American golden plover, turnstone, knot and other rare birds that breed within the Arctic circle. Speaking of the knot, I take this opportunity of describing a set of two eggs of this bird in my possession, that were collected in Iceland. An authentic egg of the knot has for many years been the object of special and diligent search by naturalists and explorers travelling in the Arctic regions where the bird is known to breed. Lieutenant A. W. Greely, U.S.A., commander of the late expedition to Lady Franklin Sound, succeeded in obtaining the long-sought for egg of the knot. C. H. Merriam publishes the account of it written by Lieutenant Greely, as follows: "The specimen of bird and egg were obtained in the vicinity of Fort Conger, latitude of 81° 44′

north. The egg in size measures 1.10x1.00, and the colour is light pea-green, closely spotted with brown in small specks about the size of a pin-head."

The above is the only authentic egg known to be in collections besides the two specimens in my possession. The British museum in London does not possess a specimen of this bird's egg, and I have been informed that none of the extensive private collections in Great Britain contain an authentic egg of the knot. I therefore have pleasure in describing the two eggs before me.

For some years my Iceland collectors have been trying to obtain eggs of this bird for me. The birds are well known in Iceland, but it was not until the summer of 1889 that one of my collectors succeeded in finding a nest and two eggs of this bird. He was so anxious to secure these two specimens that he took them before the full complement of four eggs had been laid in the nest. The eggs were found at Rædodavmsi, Iceland, June 20th, 1889. The nest was a depression in the ground, lined with bits of drift weed. The eggs are so unlike those of any other sandpiper that it is impossible to confound them with any other species. The ground colour is pale pea green, and they are finely speckled with ashy brown. On one of the eggs the markings are very faint, but the other specimen is finely speckled all over the egg. *(See Fig. 1 and 2, Plate 3.)* I believe this is the first time the egg of the knot has been figured.

The knot is a handsome bird, and is the largest of the North-American sandpipers. It is found on the shores of Lake Ontario in the fall of the year, and I have seen specimens that were shot on Toronto Island. It is a regular winter visitor to the British Islands, but in the spring it returns to the islands of the polar seas to breed.

Taking a final look at Long Lake, I returned to the cabin, and packing my specimens I paid my board bill, $1.50, and left the cabin for the station.

While waiting on the platform for the 10.30 morning train for Winnipeg, a man came along who informed me that he had

just come across a pair of bear cubs while passing through yonder bluff; he pointed to the place two miles north of Rae-burn, and I informed him that I was in that wood yesterday, and it was a wonder I escaped meeting the mother bear.

Presently the train was seen approaching in the distance, and a few minutes later I was seated in the train and on the way to Winnipeg. It was a relief to reach civilization, after having to rough it in the wild west. On reaching Winnipeg, I made my way to the Manor House where I found a post office order waiting me, and as my money had all gone, it was very acceptable. I got the cash and then went and bought a change of linen, and returning to the hotel I had a bath, after which I sat down to a good dinner, the first decent meal I had partaken of for four days. The pleasure and excitement of egg-hunting is very enjoyable and interesting, but there is no fun in having to do it on an empty stomach, for the pangs of hunger are enough to knock the energy out of the most enthusiastic oologist.

After dinner I called upon my friend the taxidermist and found that he had prepared most of the birds I had sent him, except a few I sent from Rush Lake, and these, on their arrival in Winnipeg, were too far gone to preserve.

I forgot to state previously that all the birds I shot were sent along the line east to Winnipeg to be skinned, as it took all my spare time to blow and prepare datas for the eggs collected. I found he had collected for me several sets of chestnut-collared longspur, Wilson's phalarope, and other eggs on the plains north-west of Winnipeg. I spent the evening with a sportsman friend who showed me around the city.

CHAPTER XXIV.


EXT morning, after partaking of a good breakfast, I started out for Stony Mountain, ten miles northwest of Winnipeg. Four miles west of Winnipeg I left the highway and struck out across the plain towards a wooded district. Here I found a number of nests of small birds, and obtained some fine sets of the kingbird.

I flushed a white-throated sparrow off its nest and four eggs. The nest was built on the ground at the root of a bush, and was composed of fine grasses. The eggs are not unlike those of the song sparrow, but they are a trifle larger and more glossy. The ground colour is greenish grey, and they are well spotted and blotched with burnt umber and lilac, averaging in size 83x60. On July 18th, 1891, I found a nest and four eggs of this bird at Niagara Falls on the Canadian side. This nest was built in a bush, two feet above the ground; the eggs were very handsome, but, on trying an egg with a drill, I found that incubation was advanced, so I left the rest.

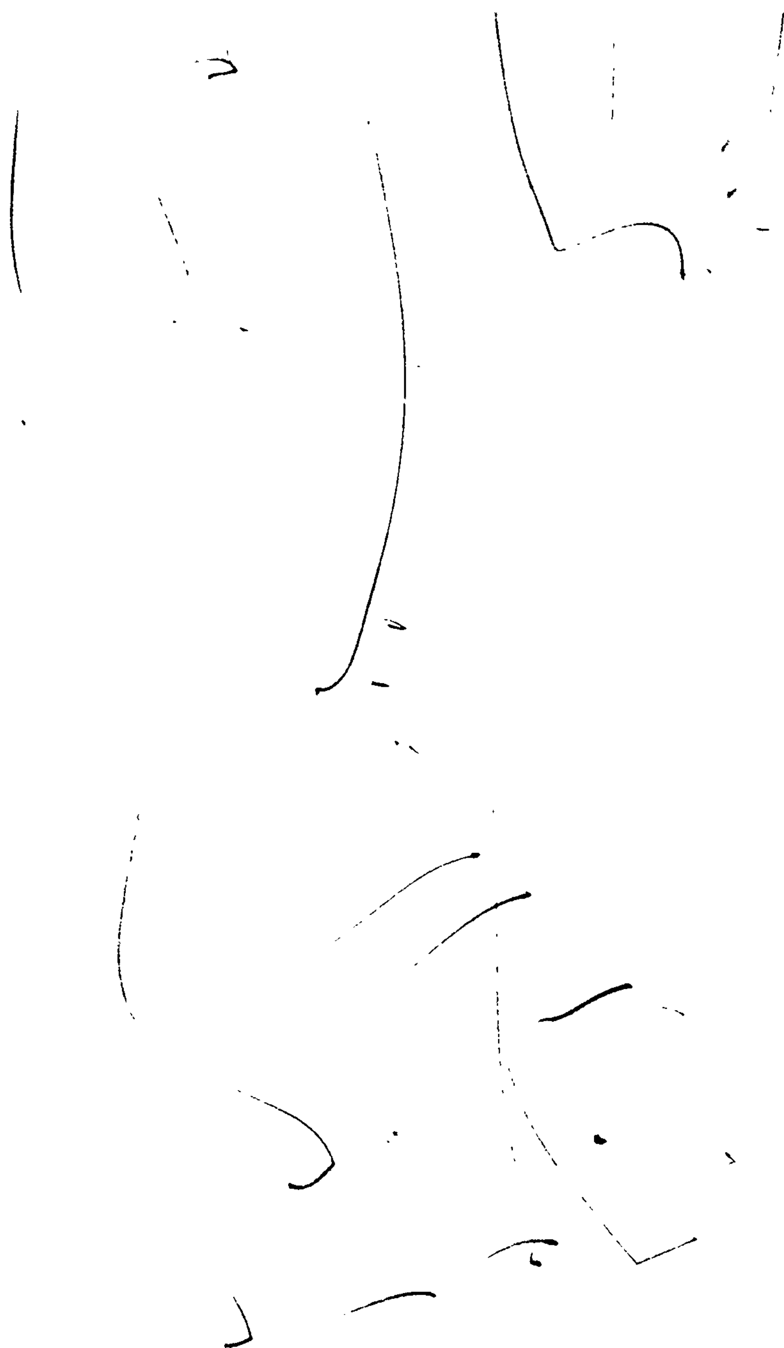
In crossing from one bluff to another, I came across a nest of the prairie shore lark containing five eggs; incubation had commenced, so I did not molest them. Soon afterwards I startled a western night hawk off its two eggs, which were fresh, so I took them. The eggs were laid on dead leaves, with no signs of a nest.

I saw a golden-crowned kinglet and carefully searched every tree in the bluffs in hopes of finding its nest, but in this I was not successful. The golden-crowned kinglet is a beautiful little bird, and its nest is an elegant piece of bird architecture. Before me are eight nests of the gold crest from Europe, they are made of green moss and lined with feathers. The nests are pensile, being suspended from the overhanging

Innisfail 1893
School Section tree above Pendleards Lake; 2 Eggs fresh
G M Bernard Shot Bird



GREAT HORNED OWL.



branches of the spruce tree; they are generally built near the end of the horizontal branches, and some nests before me are attached to a twig of the spruce. The golden-crested kinglet lays from six to ten eggs, eight being the usual number. The eggs are creamy white or buffy, some having a muddy appearance. At the larger end they are finely sprinkled with pale brown or lavender. The golden-crested kinglet breeds in Northern Ontario, Quebec, New Brunswick, Nova Scotia and Maine, and also, doubtless, breeds all along the northern tier of the United States, but owing to its small size it is overlooked. It is a regular winter visitor to the city of Toronto, where it frequents the gardens.

The ruby-crowned kinglet's eggs are scarce in collections. I have several skins that were obtained in winter in Toronto. This bird also breeds in the northern tier of the United States and in Canada. W. E. D. Scott took a nest and five eggs on June 25th, at Twin Lakes, Colorado. The nest was suspended to the leaves at the end of a branch of a pine tree, twelve feet from the ground. Dr. Merrill found a nest of this species containing eight eggs, in Montana, June 18th, at an elevation of 7,700 feet. It was in a fir tree, eighteen feet from the ground, and placed against the trunk, supported by a single branch beneath, and to several twigs to which the sides of the nest were firmly attached. Mr. Chamberlain records a nest which was taken at Lennoxville, Quebec, May 15th, 1882. This was pensile, and was attached to the branch of a small tree. It contained nine eggs, one of them a cowbird's. The nests of the ruby-crowns are usually semi-pensile, neatly and well made, with walls of thick green moss, and lined with feathers of small birds, which are woven into the sides and bottom of the structure. The eggs are five to nine in number, and are pale buffy, speckled at the larger end with deeper buff.

I came across nests and eggs of the robin, cedar waxwing, and white-rumped shrike, and also startled a great horned owl in one of the bluffs. This large owl is pretty common in Manitoba, where it nests in hollow trees, and in old crows' nests. It usually lays two or three eggs, and, like those of

the long-eared owl, they are laid in March, while the snow is on the ground. My next find was a nest of the golden-winged woodpecker, in a rotten tree stump. The hole was eight feet from the ground, and went down a foot, where the seven pearly white eggs rested on rotten bits of soft wood. Before the eggs are blown they have a salmon tint, caused by the yolk showing through the eggs. After being blown they turn into a pearly, glossy white.

Two miles south of Stoney Mountain I saw a skunk in one of the bluffs, but kept away from it. The skunk is a beautiful little animal, about the size of a rabbit, with a large bushy tail. The upper parts are white, with a black band down the back, its legs and under parts are black, and the hair on the



SKUNK.

body is long. It is well known that when the skunk is shot at and wounded it discharges a noisome fluid, and the stench from it is exceedingly abominable. The place where a skunk has been killed will retain the taint for some weeks afterwards; and should a dog get any of the fluid on its body, it is almost impossible to rid it of the disagreeable odour.

Some friends of mine were camping on the side of a lake in the Muskoka district, when, one evening at dusk, one of them saw a small white animal go into one of the tents where the provisions were. He picked up a gun and fired at it as it ran out: they found it to be a skunk, and the stench from it was so unbearable they had to take up their tents and remove away to new camping quarters. The cooking utensils and provisions were so tainted they had to throw them away, and next morning had to go to the nearest store and get a fresh supply.

Near Stoney Mountain I flushed a small hawk out of a fir tree, and, glancing up among the branches, I beheld its nest of sticks. I was soon up the tree, and was delighted to find the nest containing four handsome eggs of the sharp-shinned hawk. They were fresh, and I at once blew them to avoid breakage, as eggs run less risk of breakage after they are blown. The ground colour is pale bluish-white, and they are heavily blotched with large spots of rich chestnut-brown, and smaller spots of lavender-grey: the blotches congregate towards the larger end of the eggs. The eggs of this bird are not unlike those of the European sparrow-hawk in colour, but are less in size. Before me are three clutches of four and two of five. The eggs vary considerably even from the same nest, but all are exceedingly handsome.

One clutch of four eggs were taken near St. John, New Brunswick, June 1st, 1886, by J. W. Banks. The nest was in a spruce tree, twenty-eight feet from the ground, and composed of twigs of fir and spruce, and lined with moss. Two of the eggs are heavily blotched with rich chestnut-brown, the colour forming a zone around the larger end of the eggs, the other two are mottled all over with rusty-brown.

Another clutch of four handsome eggs were taken near Taunton, Mass., July 10th, 1880. The nest of sticks was built thirty feet from the ground, close to the tree trunk and resting on a bough. The larger half of these eggs are heavily blotched with dark chestnut, which conceals the ground colour around the butt ends. (*See plate 1, fig. 1.*) The average size is 1.50x-1.16. This hawk is a late breeder, seldom having eggs before

June, and fresh eggs are found as late as the middle of July.

In the same bluff where I took the clutch of sharp-shinned hawks, I came across a red-tailed buzzard feeding on a gopher. It flew off on my approaching near to it, carrying away the gopher. This large buzzard breeds throughout Manitoba, making its nest of sticks in the highest trees in the bluffs. The eggs vary from two to three, rarely four, and they can be distinguished from those of the Swainson's and red-shouldered buzzards by their larger size. I have before me one clutch of four eggs, four clutches of three and four clutches of two eggs. The average size is 2.35x1.80. The eggs vary considerably; the ground colour is white or bluish white, some are sparingly marked with pale brown or purplish grey, others are heavily spotted and blotched with various shades of brown, chiefly towards the larger end. I have in front of me a beautiful clutch of three eggs, which are not only unusually heavily marked, but they are also very large specimens. This set of three eggs was taken near Littleton, New Hampshire, April 30th, 1884. The ground colour is white. Two of the eggs are blotched and spotted, chiefly at the larger end, with rich brown and lilac. The third egg, the most handsome of the three, is heavily blotched and spotted with umber brown and lilac, chiefly at the smaller half of the egg, and is the richest marked specimen I ever saw, reminding one of the osprey's egg. (*See plate 1, fig. 6.*) These three eggs measure 2.50x1.89, 2.37x1.84 and 2.40x1.75.

I now struck out across the flat plain, but the sun was so powerful I was glad to again seek the shelter of a bluff from old Sol's powerful rays. On returning to Winnipeg I learnt the thermometer had registered 100 degrees in the shade at noon, so it is no wonder I felt the power of the blazing sun out on the open plain.

On entering a bluff I was saluted by a number of jays, catbirds, and thrushes, and also flushed a Canadian ruffed grouse off its nest and fourteen eggs; they were advanced in incubation, so I did not take them. The eggs were dark-buff, faintly speckled with pale-brown. The nest consisted of a hollow in the ground, lined with leaves, under shelter of a shrub.

My next find was a nest and four eggs of the clay-coloured sparrow: the nest was built in a bush, two feet above the ground, and made of dried grass, lined with horse hair, and the eggs are greenish-blue, finely spotted with brown at the larger ends.

I sat down beneath a pine tree and rested for an hour, after which I got up and turned back towards Winnipeg, which was nine miles away.

On the return journey I found several clutches of king birds and other common birds, such as catbird, red-winged starlings, and robins, but I did not take these, as I had previously collected several sets, and do not believe in taking every egg that comes in one's way. Had I taken all the eggs I found while in the North-West, I should have returned home with five times as many as I did. Take coots, for instance, out of some thirty odd clutches I found at Long Lake, I only took three clutches. At Rush Lake I could have collected close upon five hundred eggs of the avocet, and I felt somewhat greedy on afterwards counting the eggs to find I had taken over one hundred specimens. Young collectors, whenever you come across a heronry or gullery, don't take every egg that comes in your way, be satisfied with a few clutches, sufficient to show the variation in size, colour and markings and if you want a few duplicates to trade off, be satisfied with a limited number of sets, and don't carry off hundreds of eggs of one kind. Great care should also be taken not to take eggs that are advanced in incubation, which the collector will probably find useless when he gets home and begins to blow them. I have heard of young collectors visiting a gullery and taking away a large basketful of eggs, and on reaching home, finding the greater number could not be blown—had to throw them away as useless. For years I have made it a practice to try one egg out of every clutch when incubation had started, and on finding the egg could not be prepared decently, I have always left the remaining eggs in the nest, unless the species happened to be very rare, and then a second class set is better than none at all. Young collectors should also never take

young birds, for, as a rule, they are sure to pine away and die. Although for years I have greatly enjoyed the pleasures and excitement of egg collecting, still I have made it a rule never to molest the young birds, as I consider we oologists do sufficient injustice to our birds to deprive them of their eggs without taking their young ones also; besides, the parent birds are greatly distressed if their young be taken, and it is cruel and gives the birds pain; but I find from experience that although a bird will make a fuss when the eggs are taken, she soon forgets her trouble, and two or three days afterwards she has commenced to build another nest, and in due time lays another clutch of eggs. All birds, when robbed of their eggs, lay a second or even a third clutch, so that taking their eggs does not diminish our birds. It is quite another thing when the birds are shot and thus prevented from breeding and increasing. At the present day one out of every six youths, especially in Canada, seems to possess a gun, and these pot-hunters go out shooting every bird that comes in their way, for no use whatever except idle sport, and this is the cause of many of our once common birds becoming scarce. Every ornithologist should make it a rule never to shoot at a bird unless it is really wanted for a specimen. While I was away in the wild North-West, I could have shot hundreds of birds, but I never fired at a bird unless I wanted it for a specimen, and I returned home with only some fifty skins. I also prevented my guides from firing at birds for mere sport, and rebuked them whenever I caught them doing this. Every lover of birds should try and prevent our feathered friends from being wantonly destroyed.

After a long tramp, I reached Winnipeg at seven o'clock in the evening, tired and hungry. The following afternoon found me seated in the railway train bound for Toronto, and three days later I reached home, and thus my most enjoyable trip to the North-West ended, and the following day found me back at business and in harness once again.

Eight months have since elapsed, and at the moment I write, this vast northern country of which I have been writing and describing its summer aspect, is at present icebound, with a

thermometer registering thirty degrees below zero. Every lake and slough is frozen over, and not a bird or living creature is to be seen. A dead silence reigns from morning until night, unless a howling blizzard is raging. But we will only think of this country as seen in its summer garb, and as I sit before a cabinet full of specimens and open drawer after drawer and gaze with admiration on the birds' eggs and skins collected there, and examine the beautiful forms and colours, I think of the North-West as I saw it in summer. Every clutch of birds' eggs distinctly brings to mind the spot where it was collected and the surroundings, and my mind travels hundreds of miles away to the western prairies, carpeted with myriads of sweet-scented flowers and fragrant wild roses. I think of the bluffs and the rivers, lakes and sloughs, fringed with rushes and dotted over with hundreds of wild fowl, and the great over-arching dome of deep blue, and the balmy atmosphere, soft and sweet as from a bank of flowers, exhilarating as the breath of the north always is. And now, gentle reader, whether you be a naturalist, sportsman, or angler, if you wish to form a correct impression of the extent and magnitude of the Canadian North-West and its wonderful resources, take a trip from Winnipeg to Vancouver, and after having ridden across seas of green for hundreds of miles at a stretch, crossed mighty rivers, climbed dizzy heights, beheld snow-capped mountains, seen great glaciers, passed through frightful gorges, shot grizzly bears under the shadows of the mountains of the setting sun, hunted a cougar or black bear with dogs, coursed antelope with greyhounds, had your hair stand on end by seeing a wolf worried to death by high-mettled hounds, hunted musk ox, moose or cariboo with Indians or mounted police, seen lakes blacken over with myriads of water fowl, caught magnificent seven and eight-pound trout and whitefish, landed a mighty maskinonge or salmon you could scarcely carry, got lost in a willow swamp, or lost your way on an alkaline or cactus flat in some semi-deserted, treeless expanse, where no sign of life breaks the terrible solitariness from horizon to horizon, you are likely to return home a wiser man as regards the resources, extent, character and probable destiny of the North-West.